



## *Memorandum*

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**TO:** HONORABLE MAYOR  
AND CITY COUNCIL

**FROM:** LES WHITE  
City Manager

HONORABLE BOARD  
OF DIRECTORS

STANLEY M. WILLIAMS  
Chief Executive Officer

**SUBJECT:** SEE BELOW

**DATE:** 02-21-07

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**SUBJECT: STATUS REPORT ON COOPERATIVE EFFORTS BETWEEN THE  
CITY OF SAN JOSÉ AND THE SANTA CLARA VALLEY WATER  
DISTRICT**

### **RECOMMENDATION**

1. Accept the 2006 Annual Status Report on cooperative efforts between the City of San José and the Santa Clara Valley Water District relating to:
  - A. Water Supply Partnerships, including:
    1. Conservation Programs
    2. South Bay Water Recycling Collaborative
    3. Coyote Valley Specific Plan Coordination
  - B. Watershed Protection Partnerships, including:
    1. Trash Removal from Creeks
    2. Floodplain Management
      - a. FEMA Map Modernization Project
      - b. Guadalupe Watershed Flood Protection Projects
      - c. Grants and Subventions for Flood Protection.
    3. Hydromodification Management
    4. Water Resources Protection Collaborative

5. Santa Clara Valley Habitat Conservation Plan and Natural Community Conservation Plan
  6. San José Water Policy
  7. District's Comprehensive Plan
- C. Parks, Trails and Open Space Partnership
2. Approve the proposed direction on conservation workplan, focusing on
    - o Continuing existing programs to involve additional customers and new development.
    - o Expanding marketing programs to promote new water conservation technologies and developing additional water conservation ordinances.
    - o Expanding collaboration with key partnersand direct staff to report back with a full workplan for approval in Summer 2007
  3. Direct staff to add renegotiation of the District reimbursement to \$115/acre foot to the SBWR Collaborative II process and bring the contract to the Council and Board for approval prior to June 2007.
  4. Direct City and District staff to schedule and prepare an agenda and materials for a joint City Council and District Board study session on Flood Management in the Fall of 2007.

### **EXECUTIVE SUMMARY**

In January 2002, the San José City Council and the Board of Directors of the Santa Clara Valley Water District agreed to partner on a series of collaborative efforts since both agencies are responsible for providing services to the residents of San José that sometimes overlap. The City provides a broad range of land use and environmental services while the District is the primary wholesale water supplier for the County and is responsible for flood management, stream and watershed stewardship and comprehensive management of the groundwater basins.

Since then, the City Council and District Board have met annually to review progress made on their collaborative projects and provide direction to staff on issues of mutual interest. Between these annual meetings, status reports have also been provided to both governing boards.

During 2006, the Board and Council met twice, first in April to review 2005 progress on nine cooperative partnerships between the two agencies, and again in September to hold a first-ever Joint Study Session to discuss the most cost-effective ways to ensure a sufficient water supply through 2030 for the benefit of residents and the local economy. In 2007, the Board and Council are convening separately during their regular sessions reviewing this joint analysis of progress on 12 cooperative programs. In April 2007, the Board and Council will again meet in a Joint Study Session for an in-depth discussion on Water Quality and Watersheds. In addition, if approved,

the staff is recommending that the Council and Board also meet in the fall for a study session on Flood Management.

This report provides a status update on progress in a number of key areas. Briefly, the two agencies worked collaboratively to remove more than 16 tons of trash from area creeks, recommend updates of the City's Water Policy and General Plan to more effectively protect waterways and the watershed, celebrate with the community the opening of Guadalupe Flood Control project and park, expand the trail network, increase water conservation and the use of recycled water, and to identify water supply needs and the potential means for moving forward.

## **BACKGROUND**

Over the past six years, the City and the Water District have undertaken a series of collaborative efforts. The value of this approach has been evident in the level of enhanced coordination and successful outcomes on long-term projects and issues including expansion of the trail network, facilitated construction and maintenance of capital projects, and increased level of creek clean-ups. The ongoing projects are described in more detail in the subsequent sections.

## **ANALYSIS**

The status of 14 ongoing projects and issues is provided below.

### **A. Water Supply Projects:**

Water supply is an important component of sustainable living and for a vital economy in San José. State law requires detailed information verifying water availability to be considered prior to approval of specified large development projects and included in relevant environmental documentation pursuant to the California Environmental Quality Act (CEQA). The primary issue that must be addressed in preparing the assessment for any development is whether the projected water supply for the next 20 years – based on normal, single dry, and multiple dry years – will meet the demand projected for the project plus existing and planned future use, including agricultural and manufacturing uses.

One tool that can be used now to further streamline the planning process is the Urban Water Management Plan (Water Plan). The District and all major water retailers updated their Water Plans in 2005. The District, as water wholesaler for the region, works with the water retailers, including the City, to ensure that planning assumptions and demographic and water demand projections in Water Plans are consistent with the City's and Association of Bay Area Government (ABAG)'s future growth projections in the water retailers' service areas.

In addition, the City and the District have been working together to ensure that the supply of water will be sufficient through 2030. The following four projects discuss progress this past year on projects to ensure water supply.

## 1. Conservation Programs

### ➤ **Goal: Conserve 60,000 additional acre-feet per year by 2030**

Working together, the District, cities, and water retailers in the Santa Clara Valley have achieved almost 40,000 acre-feet/year of water conservation from measures implemented between 1992 and 2006. These include the installation of over 250,000 residential and commercial ultra-low flush toilets, distribution of over 228,000 low-flow showerheads and aerators, and issuing 58,000 high-efficiency washing machine rebates. In addition, a number of community and company outreach activities have been undertaken including 39,000 house calls to advise on water conservation, 710 large landscape surveys, pilot projects to encourage new technologies such as commercial high-efficiency toilets and weather-based irrigation controllers, advertising and media campaigns, community and corporate workshops, and distribution of materials.

As discussed at the Joint Council-Board Study Session on Water in September 2006, the District, City, and the retailers countywide have begun to develop a workplan to assist the District in implementing conservation programs designed to save an additional 60,000 acre-feet of water/year by 2030. In order to accomplish this, the draft workplan is focusing on three primary areas:

- **Continue existing programs to involve additional customers and new development.** Staff believes that, by continuing these voluntary programs (along with the savings from the completed programs) over the next 25 years, the District and its retailers/cities will achieve almost half of the additional conservation savings needed (roughly 30,000 acre-feet/year by 2030). Existing programs focus on reducing water usage in homes and businesses using technologies such as the ultra-low flush toilets, low-flow showerheads and faucet aerators, high-efficiency washing machines, leak detection and repair, water-efficient landscaping, and reductions in agricultural water use. Although several of these programs (e.g.; ultra-low flush toilets, low-flow showerheads and aerators) have reached their goals in terms of number of installations, they will continue to accrue savings as long as the devices are in place. Other programs that were developed in the late 1990s (e.g.; Water-Wise House Calls, high-efficiency washing machine rebates, Water Efficient Technologies rebates and an Irrigation Technical Assistance Program) will require on-going implementation through 2030.
- **Expand marketing programs to promote new water conservation technologies and adopting additional water conservation ordinances.** The most important expansion element will be additional outreach and education to homes and business that voluntarily practice conservation by installing water saving devices and changing their water use behavior. In addition, this element may include additional incentives, identifying and advertising new water saving technologies (e.g.; flash water heaters, water recirculation systems, connectionless food steamers, efficient ice machines, steam sterilizer retrofits, etc.), and adopting additional water conservation ordinances. New technologies and ordinances are expected to produce the other 30,000 acre-feet/year of additional

conservation savings needed by 2030. The District is already undertaking a variety of pilot studies, addressing such conservation strategies as weather-based irrigation controllers, more efficient water softeners, landscape hardware incentives, water-efficient landscape rebates, and cooling tower conductivity controllers to determine which are achieving savings sufficient to warrant expansion into full scale projects. Additionally the District, the City's Department of Parks, Recreation and Neighborhood Services, and the Guadalupe Gardens Technical Committee are in the process of developing a Water Efficient Demonstration Garden to be built at Guadalupe Gardens.

- **Expand collaboration with key partners.** In addition to working with the City, the District is currently working with the 13 water retailers across the county through the District's Water Conservation Subcommittee (the San Francisco PUC also participates in this subcommittee). Additionally the District works with other water agencies/organizations throughout the state, the agricultural, landscape, and business communities, and various nurseries to promote water conservation ideas and practices. The District currently has cost-sharing agreements with San Jose, three other local cities, and one private water retailer. In the future, they hope to expand the number of cost-sharing partnerships and identify additional revenue sources such as grant funding (the District secures roughly \$1,000,000 annually in grant funding). In addition to these groups, staff hopes to more fully engage the rest of the cities, the County, and the realtors, builders, and developers in water conservation activities.

Staff will bring a detailed workplan, including recommendations for 2007-08 and long term goals and resource needs, to the Council and Board in preparation for the 2008-09 budget process.

## **2. South Bay Water Recycling Collaborative**

### **➤ Goal: Utilize 40,000 acre-feet per year of recycled water by 2030**

In January 2003, the City Council and District Board approved the South Bay Collaborative Phase I Final Report that concluded a year-long collaborative process for identifying and recommending an institutional framework to most effectively meet the long-term water supply and wastewater discharge needs of the community now and in the future.

The key conclusions were:

- a) It would be very advantageous for the City and the District to work together to ensure that recycled water can be beneficially used to the maximum extent practicable in the County.
- b) Enhancing the quality of the recycled water and understanding the impact of additional uses on the groundwater basin are key to increasing the number and types of beneficial uses for recycled water. It also increases the likelihood of meeting all of the objectives for this process.

- c) District participation in the funding of the Silver Creek pipeline to ensure the availability of at least 5 million gallons per day of recycled water for use south of the Metcalf Energy Center.

After this process concluded, staff did some follow-up work on the two options for institutional arrangement that look beyond the status quo, namely development of a Joint Powers Authority and development of a long-term comprehensive agreement. At a subsequent Board/Council meeting, it was decided that a long-term agreement was the preferred option.

Since about 2004, staff has experienced difficulty with moving further in the process because the District's Integrated Water Resources Planning process and Urban Water Management Plan had not been updated, therefore, future recycled water plans and facilities could not be adequately specified.

In 2006, several new developments have occurred that now make the timing right to continue with this process. First, the IWRP and Urban Water Management Plan 2005 are complete. These Plans call for using 40,000+ acre-feet of recycled water by 2030. For example, the Coyote Valley Specific Plan Water Supply Evaluation has been completed and it calls for maximizing the use of recycled water in that area. In addition, the Board and Council have provided feedback to both staffs that groundwater recharge reuse as the method to expand recycled water in the future appears to be the most cost effective alternative and should be studied further. Finally, City and District staff are currently designing an Advanced Recycled Water Treatment Plant (see discussion below). All of these developments have driven the need for staff to continue discussions about future facilities, partnerships and costs. Therefore, we have initiated the SBWR Collaborative Phase II to develop the workplan and recommendations for future expansion of recycled water in the County.

The current schedule (Attachment A) shows that we will finalize the expected roles and responsibilities of all parties by June 2007 and complete principles for establishing fair payment by September 2007. A preliminary term sheet for review and approval by the Council and Board is anticipated to be completed in April 2008. Key milestones and recommendations will be brought to the Council and Board for their continued oversight and direction.

In addition to the Collaborative, much on-going work has been accomplished, including:

- **Increased use of recycled water.** During the past fiscal year (05/06), recycled water use in the area served by South Bay Water Recycling (SBWR) totaled more than 8,000 acre-feet, an increase of 20% over the previous year. Projections for FY06/07 indicate a further growth of the program by an additional 15% to about 9,000 acre feet, or roughly 3 billion gallons annually.

- **Renew Reimbursement Agreement.** The reimbursement agreement for recycled water produced by SBWR, last amended in 2005, is scheduled to expire June 30, 2007. This agreement, which provides approximately \$1 million annually to SBWR to help offset the cost of producing and delivering recycled water, was developed when it was recognized that recycled water provides a potable water benefit by reducing potable water demand. At that time, the District agreed to support recycled water by reimbursing SBWR \$115 per acre foot of recycled water that is used in a manner that reduces the use of potable water. As the use of recycled water becomes a more important part of the water supply portfolio, both agencies are interested in developing more effective ways to support the expansion of the recycled water system so this issue has been added to the SBWR Collaborative agenda where overall roles and costs are being discussed.
- **Partnership Agreement for Advanced Water Treatment (AWT) Project.** As noted in the last joint memo, District and City staff continue to work together towards finding ways to enhance recycled water quality to expand opportunities for reuse. One example is the joint project now under development to advance treat up to 7 million gallons of recycled water per day using membrane filtration and then blend it back into the recycled water stream to reduce overall salinity. The \$32 million project is eligible to receive funding through State Proposition 50 funds (Prop. 50 Chapter 8, Implementation Grant) as well as federal funding. Details of a proposed cost-sharing agreement for design and construction are scheduled to be brought to Council and the Board in May/June 2007.
- **Redwood Tree Solutions Study.** Another joint recycled water quality project concerns an investigation into the appropriate use of recycled water on redwood trees. Over the past several years, the health of many redwood trees in Santa Clara County has been in decline. During this time, some (although not all) have been irrigated with recycled water. To resolve concern about a possible linkage, the District, City, and other agencies have co-funded a University of California-Davis study on the effect of salinity on redwood growth. Results of the study should be available by May 2007. These results will be used to develop strategies that customers can use to successfully include redwood trees in their landscapes.
- **Joint Participation in Regional Activities.** In addition to the bilateral activities described above, the District and City continue to cooperate closely in support of a number of regionally-oriented studies and projects. For example, through their membership on the Recycled Water Committee of the Bay Area Clean Water Authority, they have collaborated with San Francisco Public Utility Commission, East Bay Municipal Utility District and four other Bay area agencies on a program to develop guidelines and model agreements between water and wastewater agencies that should facilitate production and distribution of recycled water. This program development is being co-funded by the national WaterReuse Foundation, because of its potential value in increasing water recycling nationally.

The District and City also co-sponsored a one-day Colloquium on Indirect Potable Reuse in January 2007. The Colloquium was convened in part for the benefit of Queensland (Australia) Water Commission officials on a national tour of recycled water facilities, and allowed Bay area water professionals to discuss various issues with some two dozen national experts on recycled water treatment, quality, monitoring and reuse.

### **3. Coyote Valley Specific Plan Coordination**

The draft Water Supply Evaluation (Evaluation) for the Coyote Valley Specific Plan (CVSP) is nearing completion. This document is currently scheduled to be heard by the District Board on the morning of March 13, 2007 and by the San José City Council in the afternoon of the same day. Acceptance of the Evaluation by the Council will allow it to be included in the CVSP Draft Environmental Impact Report for environmental analysis and review. The Evaluation is the culmination of a very successful interagency collaboration between the staff of the District and the City.

The Initial Draft of the Coyote Valley Specific Plan has been available for public review and comment since early December 2006. The community-based planning effort continues into 2007 with public Task Force meetings, community workshops, and other opportunities for involvement. After the Water Supply Evaluation, the next major milestone in the CVSP process is the distribution of the Draft Environmental Impact Report scheduled to be released in early March 2007.

## **B. Watershed Protection Partnerships:**

In addition to its water supply and flood protection partnerships, the City and the District work together to protect water quality, habitat, and streamside properties throughout the watershed. These partnerships are the focus of the upcoming April 20<sup>th</sup> Joint Council – Board Study Session on Water Quality and Watersheds. The section below discusses the achievements and next steps for seven cooperative projects focused on protecting water quality within the watershed.

### **1. Trash Removal from Creeks**

In September 2004, the City and District executed a Memorandum of Agreement (Agreement) for Trash Prevention and Removal (see Attachment B). The purpose of the Agreement was to formalize the commitment of the City and District to increase coordination and collaboration to achieve cleaner urban creek areas. The Trash Agreement provides for a variety of cooperative efforts, including up to three partnered creek cleanup projects each year. The following describes what was accomplished in 2006 as a result of this Agreement.

More than sixteen tons of trash was cleaned out of four creek segments in 2006.



- On July 19, 2006, approximately 2.8 tons of trash and large debris were removed from a segment of Los Gatos Creek between Lincoln Avenue and the Highway 280 Bridge.
- On August 2, 2006, approximately 1.3 tons of trash, large debris, and hazardous materials were removed from a segment of Coyote Creek between Oakland Road and Ridder Park Drive.
- On September 28 and 29, 2006, approximately 2.2 tons of trash was removed along a segment of Coyote Creek between East Julian Street and Washington Street.
- Finally, during a three-day cleanup event, held October 31, 2006 through November 2, 2006, approximately 9.8 tons of trash and large item debris were removed from a segment of Coyote Creek between Tully Road and Yerba Buena Avenue.

For all cleanup events, the District has primarily taken responsibility for providing labor, composed mainly of San José Conservation Corps or Department of Correction crews, while the City has primarily provided collection and disposal of garbage, large items, and hazardous materials. The San José Police Department also commonly provides support when cleanup areas include homeless encampments.

The Joint Trash Team and the City Departments of Planning, Building, and Code Enforcement and Environmental Services (Integrated Waste Management) collaborated to respond to a complaint about illegal dumping in Coyote Creek that was allegedly originating from an apartment complex. The team assisted the property manager with coming into compliance using a combination of education and enforcement to address specific problems that were generating trash near the creek, such as dumpster placement, frequency of dumpster pick-ups, and educating the complex's residents on proper trash management practices and illegal dumping issues.

The 2007 Work Plan continues the same objectives of the 2006 Work Plan with slight changes to the specific activities. Highlights of the 2007 Work Plan include:

- continuation of partnered creek cleanup projects,
- exchange of trash and litter outreach materials between the City and District,
- continued outreach and education for creekside property owners aimed at developing practices to manage trash on their properties effectively,
- development of a joint City-District creek cleanup outreach flyer, and
- Joint Trash Team participation in the Santa Clara County Litter Technical Advisory Committee.

In addition, two countywide efforts are focused on reducing trash.

- Santa Clara Valley Urban Runoff Pollution Prevention Program: The City and District, in coordination with the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP), will begin implementation of trash pilot projects, with the intent of

identifying structural controls to prevent trash from entering the creeks and storm drains as well as to facilitate cleanup of trash in the creeks.

- **Litter Technical Advisory Committee:** The Countywide Litter Technical Advisory Committee has taken on the challenge of creating a litter free County. To accomplish this, five sub-committees have been established. Each committee will be responsible for developing a five-year plan that will include two specific goals for each year. The sub-committees and their co-chairs are:

Enforcement:	Chief Tom Brewer and Sergeant Jeff Marozich
Education	Gary Richards and Vacant
Litter Control and Removal	John Sighamony and Dave Nelson
Volunteers	Forrest Williams and Richard Santos
Finance committee	Bob Kass

The overall Chair of the Committee is Nora Campos. The Committee officially began its work in January 2007.

## **2. Floodplain Management**

The City and the District are working on a number of significant floodplain management issues and this section provides a summary of some of these issues. Staff recommends that the next joint meeting focus on some of these critical floodplain management issues.

- **FEMA Map Modernization Project**

The Federal Emergency Management Agency (FEMA) is converting its Flood Insurance Rate Maps (FIRMs or flood maps) from a paper to digital format. While undertaking this effort, FEMA wants to assure that structures which influence flood protection comply with current FEMA standards. Structures include levees (most of which the District owns) and "levee-like" structures, such as road and railway embankments, that may act to block the passage of water. Our preliminary review of the list of levee-like structures found that the Corps has listed several roads (such as Oakland Road) that are located along the high water mark as levee-like structures. These will not be certifiable as levees under the updated FEMA certification standards.

The primary FEMA stakeholders for this effort are the participants in the National Flood Insurance Program (NFIP) which includes the City of San José. FEMA held a meeting for Santa Clara County NFIP participants on January 10<sup>th</sup> and presented requirements and timelines for action. Additionally, a Question and Answer session was held on February 8<sup>th</sup>. The District has created a team to assess its levees and will work to recertify compliance with current FEMA standards. The City will work towards analyzing the impact of areas currently protected by levee-like structures within its jurisdiction.

It is probable that properties adjacent to levees or levee-like structures not originally built to protect from a 1% flood (flood having a 1% chance of being equaled or exceeded in any given year; these are commonly known as "100 year floods") will be mapped by FEMA into a floodplain. Also, some older levees and many levee-like structures may not meet current stability standards, which have been strengthened over the years. Changes to FEMA's floodplain map are anticipated to occur in mid-2008. At that time, property owners in affected areas who have federally-backed mortgages will be required to purchase flood insurance and will be subject to land use and building standards appropriate to this change in designation. While both the City and the District support the concept of understanding flood risks, these new requirements could have a financial impact to citizens of San José. City and District staff are currently working with FEMA so that the recertification process is fully understood and efforts can be prioritized. As the process that FEMA has dictated has a very compact schedule, the Council and the Board will receive additional information as it becomes available.

- **Guadalupe Watershed Flood Protection Projects**

In February 2002, the District, the City, the Redevelopment Agency of San José, and the Sacramento District of the U.S. Army Corps of Engineers set the goal of achieving flood protection on the Guadalupe River Project by December 2004, with the remaining recreational features to be completed the following year.

Flood protection was achieved as planned and the Downtown and Lower Guadalupe River Projects now assure the safe passage of flood flows to San Francisco Bay. A successful celebration was held in September 2005 where thousands of residents enjoyed the new Guadalupe River Park. As a result of this project, a large portion of the Cities of San José and Santa Clara are now eligible to be certified by the Federal Emergency Management Agency (FEMA) with a 100-Year Flood Protection rating. On October 25, 2006, FEMA issued the Final Letter of Map Revision (LOMR), which eliminated the need for flood insurance for over 3,400 properties. A joint-letter was sent to the community the last week of November, 2006.

Although full flood capacity has been provided, there are still two significant project elements, which remove and replace two railroad bridges, to be constructed over the next couple of years. Replacement of those bridges is important not only to the long term maintenance plan for the project, but also impact the completion of permanent recreational trails along both sides of the river.

The temporary trail crossing for the 2.6-mile stretch of the Guadalupe River trail is operational at the Union Pacific Railroad (Union Pacific) tracks. In the fall of 2005, the Corps of Engineers constructed the approach to the east bank bridge under crossing and subsequently, the Redevelopment Agency completed the under-crossing in summer of 2006.

Union Pacific and the Cousins Market Center Development (Cousins) are constructing the west bank trail at grade crossing at the Union Pacific tracks. However, Cousins is currently behind schedule on the completion of this track crossing. Every effort is being made by the City to work with Cousins and Union Pacific to have this trail opened during the summer of 2007.

The new vehicle bridge over the Guadalupe, which will serve the future development of Union Pacific's property east of the Cousins development, is currently being designed. The U.S. Army Corps of Engineers (Corps) will construct the bridge, which is the only public point of access to the property. The Corps is responsible for both the vehicle and railroad bridge. The Corps is currently preparing the final design for both bridges and Coleman abutment retrofitting to address Union Pacific and regulatory agencies comments. Staff is concerned that the current federal budget for FY07 shows inadequate funding allocated for the Downtown Guadalupe River Project, which could delay the construction of the bridges and Coleman abutment to 2008 or later.

On the Lower Guadalupe River Project, District staff has been working with City staff to combine the City's Airport Parkway Under-Crossing project into the construction documents of the District's Highway 101 Under-Crossing project along the Lower Guadalupe River. Further information about this collaborative effort is provided in Section C – Parks, Trails and Open Space Partnership.

The City Council on December 5, 2006, authorized the City Manager to negotiate and execute a fund transfer Agreement with the District for an amount of \$1,839,500. The agreement seeks to provide funds for the District to award a construction contract for the Airport Parkway Under-Crossing and Surface Improvement project. This project was defined as a critical element of the City's Lower Guadalupe River Master Plan (approved by the City Council in June 2005) because it would provide a transition point for future trail users to cross from the east to the west bank. Construction of the project is scheduled to begin in June 2007.

- **Grants and Subventions for Flood Protection**

Propositions 1E and 84 were recently passed by the voters. These propositions will provide grants and subventions (reimbursements from the state for specific authorized flood protection investments) for flood protection measures. The District is working with state and regional groups to determine how best to access these funds for Santa Clara projects. Information from the Department of Water Resources as to the application and grant approval process is still preliminary. It is clear, however, that the City and the District will need to jointly support applications for grants to increase the likelihood that our application is judged favorably.

### **3. Water Resources Protection Collaborative**

The Collaborative's mission is to help protect, restore, and enhance Santa Clara County streams and streamside resources through management of development along creeks. Collaborative members include staff from the County of Santa Clara, the fifteen cities in Santa Clara County, the Santa Clara Valley Water District, the Guadalupe-Coyote Resource Conservation District, the San Francisco Bay Regional Water Quality Control Board, various business and development interests, property owners and environmental, agricultural and community interests. During 2006, the work of the Collaborative transitioned from developing work products including model Guidelines and Standards for land use near streams to implementing the work products and agreements. See Attachment C for the most recent fact sheets for creekside property owners.

The District used the Collaborative's work products and agreements to draft its Ordinance 06-1 and, after extensive public outreach, the District Board adopted the Ordinance on October 24, 2006. This Ordinance focuses on the protection of District facilities or streams where the District has fee ownership or an easement. For activities outside District property, easements, review and approval will be conducted by the local jurisdiction once the Ordinance becomes effective on March 1, 2007.

The Collaborative agreements call for each jurisdiction to implement, as appropriate, the model Guidelines and Standards. City staff has completed an evaluation of the Guidelines and Standards and concluded that, in San José, many of the Guidelines and Standards are already, or can easily be, incorporated into existing City policies and practices and implemented in the review of projects requiring Planning permits. The City Council adopted a resolution affirming that the City's current land use requirements, policies, and practices are consistent with the Guidelines and Standards at the February 13, 2007 City Council Meeting. In addition, in December 2006, the City Council approved new General Plan text language to strengthen the protection of water resources. Although many of the Guidelines and Standards are already in place, there are some additional review elements added to City procedures. As the workload impacts of these changes are clarified through implementation, additional resources may be recommended through the normal budget processes.

The Collaborative's 2007 ratified workplan includes the adoption, implementation, and adaptive management of the Guidelines and Standards, continuation of the Early Consultation program, outreach and educational activities, coordination on enforcement issues, and District technical assistance. Adaptive management addresses the possible need to bring forward additional modifications to existing regulations to ensure smooth implementation.

### **4. Hydromodification Management**

As participants in the Santa Clara Valley Urban Runoff Pollution Prevention Program (Program), both the City and Water District are actively involved in county and regional efforts to address the affects of hydromodification on local creeks. Hydromodification refers

to changes in the amount and timing of storm water runoff, which are caused by development. This results in increased creek flows that occur with greater frequency, which can in turn contribute to excessive creek erosion. The Program's Hydromodification Management Plan (HMP) requires that development projects match pre-project runoff patterns in areas where such additional runoff is likely to increase creek erosion. For San José, the approach focuses on the largest projects in the least developed areas of the City, to the south and east.

Since the Water Board approved the Santa Clara Valley HMP in 2005, other Bay Area counties have also completed similar plans. The Water Board has adopted a plan for Contra Costa and is scheduled to consider plans for San Mateo and Alameda counties in March. The approaches generally follow a common standard of controlling post-project flow patterns to match pre-project flows, but in some cases have considerably different implementation approaches. For example, the Contra Costa plan includes prescribed flow control designs (such as a standard swale or bio-retention planter box) that offer less flexibility of design but simplicity of implementation. The Water Board staff has indicated that they plan to propose to their Board changes to the Santa Clara Valley HMP concurrent with consideration of the Municipal Regional Permit in the summer of 2007. The changes generally include apply the controls to a greater number of projects and greater clarity – and perhaps restraint – on the flexibility of approaches to achieve project level compliance. Staff from the City and Water District will continue to participate in regional discussions on this issue and it will be a featured part of the April Joint Study Session.

##### **5. Santa Clara Valley Habitat Conservation Plan and Natural Community Conservation Plan**

A Habitat Conservation Plan (HCP) is a long-term regional plan designed to mitigate the harmful effects on federally listed threatened or endangered species. A Natural Community Conservation Plan (NCCP) is the State of California's version of an HCP and focuses on the conservation of species and the preservation of habitats (see Attachment D). The intended benefits of preparing a plan are: 1) a federal and state resource agency-approved preservation plan that provides clarity and ensures local partners of mitigation requirements for a range of projects and activities that results in enhanced habitat preservation for the species of concern; and 2) enhanced habitat preservation for the species of concern; and 3) a streamlined permit process for all involved.

In 2001, the County of Santa Clara, City of San José and the Santa Clara Valley Water District signed letters of commitment to prepare an HCP. In 2004, the three agencies, together with the Valley Transportation Agency, approved a Memorandum of Understanding to jointly prepare an HCP/NCCP. In 2005, the original partners were joined by the cities of Morgan Hill and Gilroy who signed the planning agreement required under the state's NCCP Act. The firm of Jones & Stokes was retained to prepare the plan. Throughout the process, the local partners and consultants have been working closely with staff from Department of

Fish & Game, US Fish & Wildlife Service and NOAA Fisheries to ensure that the plan developed will meet all agency requirements.

Substantial work has been accomplished in 2006. The project is on schedule and has accomplished the following:

- Scope finalized
  - Expansion of the study area to include all parts of San José except for lands north of Highway 237.
  - Species to be evaluated by the Plan have been decided.
  - Interest in expanding boundaries of the study area beyond was examined.
  - Activities to be covered by the Plan have been identified by each local partner.
  - Discussion on the Broad Goals for the Plan has begun.
- Agreements signed
  - Approval of a Planning Agreement by all partners, celebrated by a signing Ceremony in October 2005.
  - Selection of consultants to assist in broad public communication and provide liaison services to an independent science panel.
  - Economic Consultants hired in fall of 2006.
- Key teams are in place
  - The Stakeholder Group has met monthly since October 2005.
  - Vigorous science-based process to develop conservation strategies has started.
  - Science Advisors met in July and submitted a final report in December 2006.
  - Attorneys from the legal departments of the local partners met.
- Outreach and coordination
  - Public training session for over 50 people was held in January 2006.
  - Public information meeting was held in October 2006.
  - Coordination with related projects such as the city's Coyote Valley Specific Plan and the District's Fisheries and Aquatic Habitat Collaborative Effort is ongoing.
  - An interim process for reviewing local projects by resource agencies during the Plan preparation stage has been established and is ongoing.

## **6. San José Water Policy**

The *San José 2020 General Plan* text was amended and approved by City Council on December 12, 2006 to make additions, revisions and clarifications to Natural Resources, Water Resources and Level of Service goals and policies to clarify and strengthen the City's commitment to preservation and protection of water resources. These recommendations were based on discussions with the Water Policy Team comprised of staff from the Environmental Services Department and the Santa Clara Valley Water District.

Future work activities in 2007 will focus on revisions to the Water Policy, any additional changes to the General Plan, and coordinating on upcoming City's General Plan and District Comprehensive Water Plan.

## **7. District Comprehensive Plan**

To foster better understanding and partnerships among the cities/county and the District and to provide a guide to better link economic development/land use interests with water related issues, the District is preparing a Comprehensive Water Resources Management Plan. The Plan will include existing District policies in the areas of watershed stewardship, water supply, flood protection, watershed health and open space, trails and recreation. The Plan will draw from existing District policies found within various document and integrate these policies into one document using a General Plan format.

In spring 2007, District staff intends to work with City staff and other city planners to help assure that the integrated policies are compatible with a General Plan format. After this step, the District intends to have community involvement in the review of its existing policies. Special districts are not required to have general plans and this effort by the District maybe the first within the State. The preparation of this plan was inspired by suggestions from City staff as a means to enhance our mutual understanding and cooperation.

### **C. Parks, Trails and Open Space Partnership**

The District and the City share a common goal of developing trails and open space. The District seeks to create 70 miles of trails countywide under its Clean, Safe Creeks and Natural Flood Protection Program. The City is developing a 100-mile network of trails within its boundaries. This partnership supports the efforts of both agencies. Since 2005, working together, we have opened over 22 miles of trail and work is underway on an additional 40 miles of potential trails.

At the beginning of each fiscal year, the City's Trail Program staff issues an Annual Trail Report. The document is intended for the general public and provides an overview of trail development over the past 12 months. The report is posted on the Trail Program's web page <http://www.sjpark.org/Trails/trailsindex.asp> (click the "Reports" link within the Trail Program section). Note that, for the purposes of this report, only the projects that are identified as part of the CAP are discussed. Information on non-CAP projects being developed by the City can be found on the Trail Program web site

#### **Program Updates**

- A funding challenge may develop prior to June 2007. A large share of new program funding is derived from the federal transportation bill (SAFETEA-LU). The bill includes four earmarks valued at \$11.2M for development of three trails [Coyote Creek (2 earmarks), Bay Trail and Lower Guadalupe River]. A significant amount of paperwork is required to transfer funds to the City, and the federal program only provides a percentage of the total funding so a local source of funding will be required. The City has a staffing vacancy in the team that provides fiscal support to Trail Program staff. Program staff is attempting to prepare all necessary paperwork and will work with the City's Budget Office in an effort to identify funding sources so that work can proceed during this fiscal year. The City



committed through the MTC TIP (Transportation Improvement Plan) to expend \$1,542,000 during the current fiscal year on design work for the Bay Trail and Lower Guadalupe River Trail projects.

- Substantial improvements continue to be made to the City's Trail Program web site. Some new features developed over the past quarter are listed in Attachment E:
- City Parks staff coordinated with the City's Environmental Services Department to obtain funding for a technical study to determine what resources and opportunities exist for the use of recycled materials for trail construction. The study commenced in February 2007.
- City staff presented an overview of the Trail Program at the October 26, 2006 meeting of the California Parks Recreation Society. The presentation focused on community outreach strategies.
- In December 2006, City staff met with Kaiser-Permanente staff to share information on trails that are available to employees and patients seeking recreational facilities near the agency's south San José campus. Kaiser will produce a monthly employee newsletter article on nearby trails. City staff will support the effort with maps and data.
- In September 2006, City and District staff jointly presented information on the CAP Trails at the Healthy Communities Conference conducted at City Hall.
- City of San José was designated by the League of American Bicyclists as a Bicycle Friendly Community. The City's Trail Program was presented in the application as an important element in offering bicycle facilities.

#### Project Updates

Detailed overview of each active project is provided in Attachments F-H. In summary, the following is in progress:

- Grant funding applications:
  - Grant request to the VTA seeking \$1,005,000 in funding through the Community Design & Transportation (CDT) program. These funds were sought for design and construction of the trail within Kelley Park, between Story Road and Phelan Avenue. The grant was denied because the project is not directly adjacent to a transportation corridor.
  - Grant request to the Metropolitan Transportation Commission seeking \$1,005,000 in funding through the Transportation for Livable Communities program. These funds were also sought for design and construction of the trail within Kelley Park, between

- Story Road and Phelan Avenue. An award was not received due to a highly competitive grant environment.
- Grant request to the State of California seeking \$350,000 in funding through the California River Parkways program. These funds were sought for design and construction of trail improvements along the Lower Guadalupe River, between Gold Street and Highway 237. No final announcement has yet been received from the State.
  - Opportunities to share resources in development of projects of common interest:
    - The Lower Guadalupe River Project has provided an opportunity for the agencies to combine resources in order to more efficiently develop a project. City and District staff have been working to combine the City's Airport Parkway under-crossing and the construction documents of the District's Highway 101 under-crossing at Guadalupe River. By combining the two projects, we anticipate receiving more competitive bids due to the avoided redundant costs (e.g. mobilization and administration) of two separate projects. It also saves costs by eliminating the risk of having two contractors working in close proximity and avoiding delays due to access and mobilization issues. There was also significant design cost savings to the City due to the District-provided base map and construction plans with which City staff completed the detailed design work. Permits obtained by the District allow construction of both the Highway 101 and the Airport Parkway Under-Crossings.
    - The City Council, on December 5, 2006, authorized the City Manager to negotiate and execute a fund transfer Agreement with the District for an amount of \$1,839,500. The agreement seeks to provide funds for the District to award a construction contract for the Airport Parkway under-crossing and Surface Improvement project. This project was defined as a critical element of the City's Lower Guadalupe River Master Plan (approved by the City Council in June 2005) because it would provide a transition point for future trail users to cross from the east to the west bank. Construction of the project is scheduled to begin in June 2007.

### **COST IMPLICATIONS**

There are no additional cost implications at this time. The budgetary impact of each agreement will be brought to the Council and Board as part of the final approval of any such agreement.

### **PUBLIC OUTREACH**

Public outreach has been part of individual projects discussed above including numerous community meetings on both the trail network and specific trail system project master plans; meetings and workshops on water conservation, the Coyote Valley Specific Plan; Water Resources Protection Collaborative stakeholder work group meetings, public meetings on trails, and meetings and a public workshop on the Habitat Conservation Plan.

02-21-07

**Subject: Status Report Cooperative Efforts Between City of San Jose and Santa Clara Valley Water District**

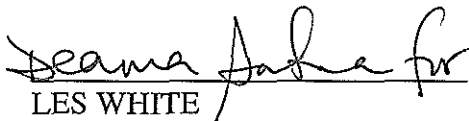
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## COORDINATION

This memo was coordinated with staff from the City's departments of Environmental Services; Parks, Recreation and Neighborhood Services; Planning, Building and Code Enforcement; Public Works, and the Office of Emergency Services; and with the San José Redevelopment Agency and the City Attorney's Office and the appropriate Water District staff.

## CEQA

Not a Project. Environmental review was completed for each of the individual projects described in this Annual Status Report and, in reviewing the implementation status of the various projects described in this Report, neither the City Council nor the District Board are considering taking subsequent actions subject to CEQA.



LES WHITE  
City Manager  
City of San José



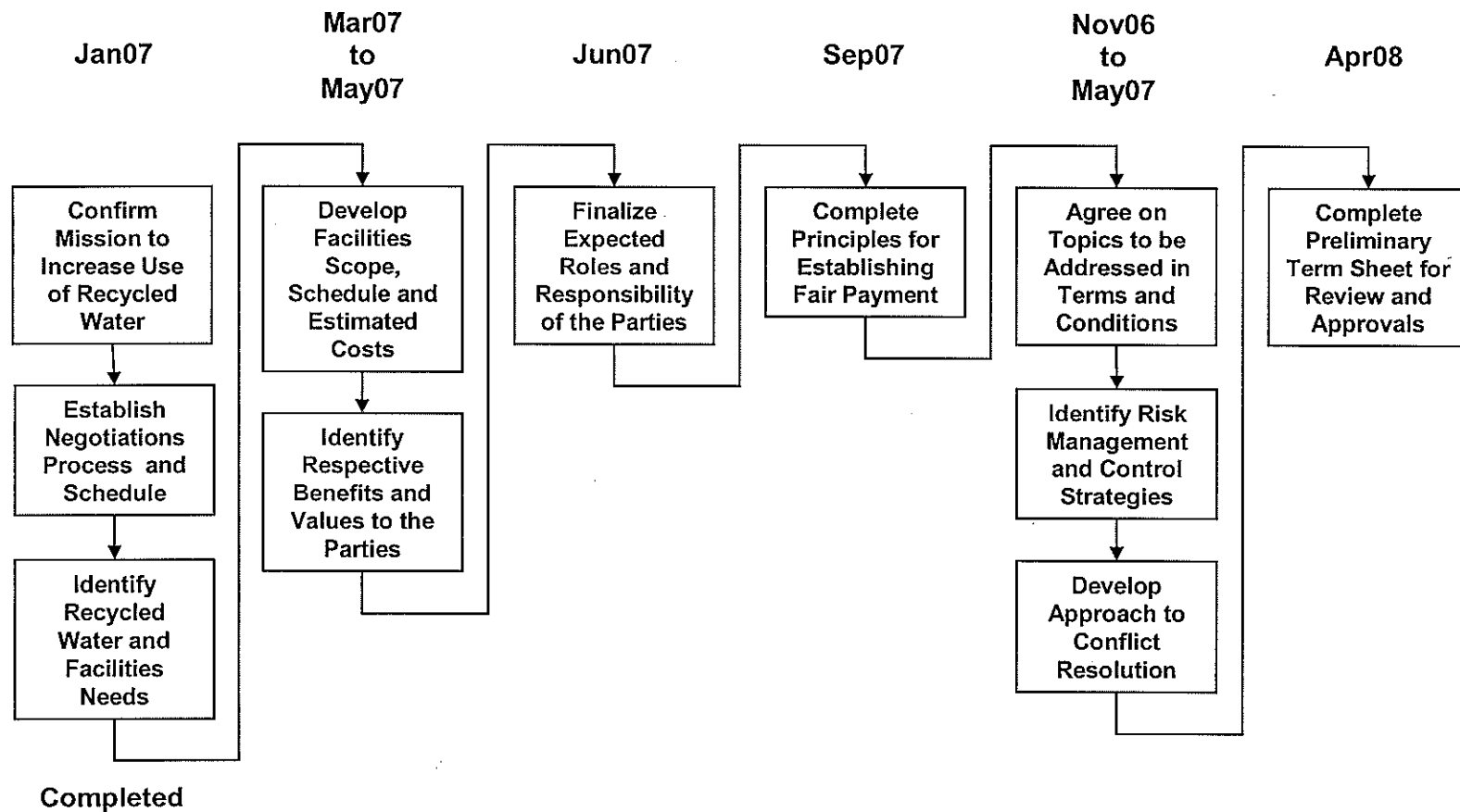
STANLEY M. WILLIAMS  
Chief Executive Officer  
Santa Clara Valley Water District

### Attachments:

- Attachment A: SBWR Collaborative process timeline
- Attachment B: Trash Agreement Fact Sheet
- Attachment C: Outreach Fact Sheets to Creekside property owners
- Attachment D: Habitat Conservation Plan Fact Sheet
- Attachment E: Trails website enhancements
- Attachment F: Current Status of Priority CAP Trail Projects (as of 2-17-07)
- Attachment G: Trails Projects Performance Measure #1
- Attachment H: Trails Projects Performance Measure #2

## South Bay Water Recycling Collaborative Phase II

### Preliminary Negotiations Process Flow Diagram



# City of San José and Santa Clara Valley Water District

## Trash Prevention & Removal

### MOA

#### Why trash in creeks is a problem

In 2001, San Francisco Bay Regional Water Quality Control Board staff issued a report recommending that all urban creeks, lakes and shorelines be placed on a monitoring list to track the threat of trash impairment to water quality.

Trash impairment in creeks is a serious concern to both the City of San José and the Santa Clara Valley Water District. Trash is a pollutant that may impact both the aesthetic quality and beneficial uses of our creeks and waterways. Trash can form large accumulations in creeks, which may hamper recreational use, impact water quality and potentially hinder flood-control protections. Trash accumulates in creeks several ways, including illegal dumping, homeless encampments and deposits from wind or through urban storm sewer systems.

San Jose prides itself on being a large city that also strives to be a clean city. As such, the City employs a variety of strategies to minimize and collect litter and debris. The mission of the District is a healthy, safe and enhanced quality of living in Santa Clara County through comprehensive management of water resources in a practical, cost-effective and environmentally sensitive manner. Both the City and the District have partnered to address this growing concern.

#### Joint effort to address trash in creeks

The City and the District entered into a Memorandum of Agreement, or MOA, for trash prevention and removal in creeks and waterways within the City of San José. Both the City and the District view clean creeks as a priority and, with the "Trash MOA," have improved our ability to pool resources to address trash in creeks in an efficient and cost-effective manner.

Both the City and the District employ diverse strategies to minimize and collect litter and debris. The MOA allows both parties to target resources in areas that have serious trash accumulations, are left out of regular litter management efforts and/or are on parcels of questionable jurisdiction.

Since its inception in September 2004, the Trash MOA has resulted in seven partnered cleanups to remove approximately 24.5 tons of trash, debris and hazardous wastes from segments of the Guadalupe River, Los Gatos Creek and Coyote Creek.

#### Scope of the Trash MOA

##### I. Perform partnered cleanups

Identify and implement clean up projects that fall outside the scope of the city and district's routine trash-removal activities, based on agreed-upon criteria for identifying projects and the responsibilities of each agency. The annual work plan stipulates the number of partnered cleanup projects to be undertaken (typically three).

##### II. Identify existing coordination efforts

Review existing trash prevention and cleanup programs and strategies in both the city and the district, and identify where the city and the district can most effectively coordinate trash prevention and removal programs.

##### III. Specify improvements & new initiatives

Review and recommend improvements to existing programs, coordination tactics, and identify new activities to be undertaken as part of this agreement, e.g.: pre-cleanup outreach and the use of enforcement.

##### IV. Coordination

Coordinate with other trash-related programs and activities, e.g.: the Trash Ad Hoc Task Group of the Santa Clara Valley Urban Runoff Pollution Prevention Program and the Santa Clara County Trash Technical Advisory Committee (TAC).

Waterway	Tons Removed	Types of debris removed
<b>Coyote Creek:</b>	<b><u>19.26</u></b>	<ul style="list-style-type: none"> <li>⌀ Garbage</li> <li>⌀ Illegally dumped large items (e.g.: appliances, furniture, etc)</li> <li>⌀ Hazardous waste (e.g.: batteries, oil, tires)</li> <li>⌀ Trash rafts</li> <li>⌀ Abandoned cars</li> </ul>
Between Quinn Avenue and Tully Road	4.5	
At Montague Expressway	1.5	
Between Oakland Road and Ridder Park Drive	1.33	
Between East Julian Street and Washington Street	2.17	
Between Tully Road and Yerba Buena Avenue	9.76	
<b>Guadalupe River, between S. Bascom Ave. &amp; Southwest Expwy.</b>	<b>2.5</b>	
<b>Los Gatos Creek, between Lincoln Avenue &amp; the Interstate 280 bridge</b>	<b>2.77</b>	
<b>Total:</b>	<b>24.53</b>	

## Short- and long-term solutions

The Trash MOA is a successful partnership, providing valuable service by removing tons of trash and hazardous wastes from our creeks. However, partnered cleanups are but one facet of larger efforts to address trash. Trash in creeks and in our community is a societal issue. It encompasses a broad array of issues, of which water quality is but one of many. Short-term solutions like cleanups are only a small part of the global issue. The City and the District are focused on reducing trash and its impacts on our waterways within their means and jurisdictional limits. Efforts are under way to bring a larger coalition of stakeholders together to address the issue of trash in a broad-based, long-term strategy for both the City and the District.

## Points of Contact

City of San José Environmental Services Department Watershed Protection Division

Steven Osborn, Stormwater Program Manager, 408 277-5635

E-mail: [steven.osborn@sanjoseca.gov](mailto:steven.osborn@sanjoseca.gov)

City of San José Department of Parks, Recreation, & Neighborhood Services Anti-litter Program

Rick Stanton, Community Services Supervisor, 408-277-3208

E-mail: [rick.Stanton@sanjoseca.gov](mailto:rick.Stanton@sanjoseca.gov)

Santa Clara Valley Water District Field Operations Unit

Carol Fredrickson, Field Operations Unity Manager, 408-265-2607 x2933

E-mail: [cfredrickson@valleywater.org](mailto:cfredrickson@valleywater.org)

Santa Clara Valley Water District Stream Water Quality Unit

J. Brett Calhoun, Senior Water Quality Specialist, 408-265-2607 x2653

E-mail: [jcalhoun@valleywater.org](mailto:jcalhoun@valleywater.org)



# Frequently Asked Questions for Land Use Near Streams



## Handout 1 of 7

### Who, What, Where, When & Why

The cities of Santa Clara County, the county, and the Santa Clara Valley Water District are adopting new guidelines and standards (Guidelines and Standards) to assist with review of construction projects proposed near streams. Adoption of these guidelines vary from jurisdiction to jurisdiction, as they are integrated into and complement existing planning and permitting procedures. For most cities and the county, the guidelines and standards will be incorporated into the cities' and the county's development and building permit review process on or about March 1, 2007. Contact your local planning and permitting department for the effective date in your area.

### What are the "guidelines and standards for land use near streams"?

The guidelines and standards for land use near streams include requirements and recommendations for land-use activities in and around Santa Clara County streams that are designed to protect stream resources. They will be administered as part of your local land use agency planning and permitting department's standard permitting process. To learn more, ask to see a copy of the "User Manual: Guidelines and Standards for Land Use Near Streams" at your local city or county planning or building department or on line at [www.valleywater.org](http://www.valleywater.org).

### What are the benefits of the guidelines and standards?

The guidelines and standards provide uniform guidance to property owners and developers about how to design and construct streamside development in a way that protects both the property and the resource. Some efficiencies in the permit process are accomplished by clarifying requirements and recommendations up front. In most instances, permitting is more streamlined than before, because a permit from the Santa Clara Valley Water District is needed only if an activity is located on a district easement or facility.

Within the larger context, the use of the guidelines and standards helps protect not only an individual property but also other property owners along the stream from flooding, slope failures, erosion, and the deposition of eroded material. Local communities also benefit from healthy streams, safe streamside structures, improved flood protection and water quality, and potentially increased property values if streamside habitat is left intact. The guidelines and standards also help ensure the stability of both structures proposed near streams and the stream bank.

### How is the permitting process different from before?

Previously, applicants had to get permits from both the Santa Clara Valley Water District and a local jurisdiction (either a city or the county, if unincorporated) for construction and activities near streams in addition to permits required by resource agencies. Under the new arrangement, each city and the county has permitting authority for streamside activities, unless the activity is on land either owned by, or under easement to, the district, in which case an encroachment permit must be obtained.

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## How does the new permitting process work?

When a property owner applies for a building or land development permit, the permitting agency determines if the parcel is within the "streamside review area." This area includes all properties abutting or in proximity to a stream, including all properties located within 50 feet from the top of bank. If a parcel falls within the "streamside review area," the permitting agency reviews the permit application using the guidelines and standards to protect stream resources.

## Does the new process lengthen the permit review process?

No. It streamlines the permitting process by making permit requirements more clear, certain and predictable.

## Does the new process make getting a permit more expensive?

Major developments must already adhere to regulatory and resource agency permit requirements, so the permitting process should not be any more expensive.

For projects proposed near the top of bank, there might be some extra cost if a geotechnical analysis is needed to determine the stability of a streamside slope and potential hazard from the stream flow. However, in many cases, this analysis is already required.

## What other permits do I need to develop a streamside site?

For any projects located within or near a stream, permits are required from other state and federal agencies, such as the California Department of Fish and Game, the Regional Water Quality Control Board, and the U.S. Army Corps of Engineers. Your local agency staff can inform you about their permit processes.

## Are there new regulations for streamside properties?

The answer depends on the jurisdiction. Some cities already have specific regulations for streamside properties. Each city and the county are in the process of incorporating the guidelines and standards into their development and building permit review process. An example of a change in regulation is that for developments requiring landscaping plans, specific guidance will be provided about protection of the riparian corridor, the use of native plants, and avoidance of invasive plant species. New regulations may also include guidance and a process for determining how close a structure can be to a stream to help ensure stability.

Finally, there may be new requirements specific to permit application, some of which may be new to some cities. The applicant may be asked to describe:

- a. The size and type of the stream on the parcel
- b. The type and location of any expected land-use activities proposed in relation to the location of the stream
- c. Pre-existing streamside conditions (i.e., bank erosion and flooding)
- d. Potential streamside impacts related to development and construction (i.e., removal of riparian vegetation, grading and drainage over the streambank) and
- e. How these potential impacts and/or pre-existing conditions will be addressed.

## What steps do I take to apply for a permit to develop a streamside parcel?

Each city and the county has its own process for permit application, so you need to consult with your local building and planning staff. If the activity is on Santa Clara Valley Water District property or easement, your project will be referred to the district and you will need a separate permit. The planning and building staff in your jurisdiction will be able to tell you if whether your activity is on district property or easement.



# How to Be a Good Stream Steward



## Handout 3 of 7

Actions taken in your own backyard can prevent and reduce harm to your local stream. By being a good stream steward, you help protect your property and that of your neighbors from flooding, slope failures and erosion.

## Stream Stewardship means

- Respecting the value of healthy streams,
- Treating streams in ways that will sustain their benefits for current and future generations,
- Recognizing that each of us needs to do our part in preserving streams,
- Managing streamside land in a manner consistent with public health and safety and respect for property rights.



The following Best Management Practices (BMPs) have been developed to support the protection of streamside natural resources. Many practices apply to vegetated stream areas. If the stream banks by your home have been lined or hardened, please consider the practices that apply to your site and to the creek or bay down stream.

## 1. Water Quality

- Direct surface drainage away from streams and do not allow water to sheet flow over unvegetated areas of the stream bank.
- Encourage infiltration by minimizing paving materials and installing pervious materials such as porous pavers, wood or gravel.
- Use vegetated buffer zones to reduce surface runoff into streams.
- Plant landscape materials that minimize the use of pesticides and fertilizers. Use organic soil amendments rather than chemical fertilizers.
- Do not drain pools or spas to the storm drain, gutter or creek. Chlorine and copper algacides are toxic to aquatic life. Drain to the sanitary sewer or let chlorine dissipate for two weeks and drain to landscaping.
- Dispose of vegetation debris, lawn clippings and animal waste with your recycling or household trash. Although biodegradable, too much organic material degrades the riparian habitat.

## 2. Streambanks and Streambeds

- Preserve existing riparian vegetation.  
This includes both trees and understory shrubbery.
- Keep structures out of the stream zone.  
Stairs and retaining walls can degrade creek banks and impact your neighbor's stream bank.
- Drain roof gutters to landscaped areas or to the street. Pipes draining onto or above the stream bank can cause erosion.
- Don't dam or take water from the stream.
- Monitor the stream bank condition.  
Replant barren or disturbed slopes as soon as possible or provide erosion blanket or straw to protect slope until permanent vegetation is established.
- Do not use tires or broken concrete for erosion repair or slope protection.
- Eroded stream banks should be repaired with "soft" methods, such as geotextiles or soil filled mats or for severely eroded areas, boulders interspersed with willow wattles.  
Seek professional help with this work to ensure proper installation that protects the stream, your property and your neighbors' properties.
- If possible, coordinate with upstream or downstream property owners to design and implement streambed or streambank improvements for a reach of stream.



Biotechnical erosion repair.

## 3. Vegetation

- Plant riparian vegetation to provide shading of streams, where possible.
- Use native watershed-specific plants or non-local California natives. When planting in riparian areas exclude invasive plants from your landscaping plan.
- New native plantings may need irrigation to help ensure establishment but should be weaned from irrigation for long-term survival.
- Remove invasive plants from riparian corridors, especially those which spread rapidly and degrade riparian habitat, such as pampas grass (*Cortaderia selloana*) and *Arundo donax*.
- Do not place structures within the drip line of mature riparian trees, such as oak, sycamore, alder, etc.



Giant reed (*Arundo donax*)

## 4. Fisheries:

- Preserve in-stream and near-stream riparian vegetation with canopies providing shade and nutrients for aquatic life.
- Avoid removing woody debris, which provides fish habitat in streams unless it poses a flooding or erosion threat.

Invasive plant removal can require special techniques. Contact the Santa Clara Valley Water District for additional guidance at 408-265-2607, ext. 2650.

# Bank Stability for Structures Built Near Streams



## Handout 4 of 7

*Slope-stability protection areas along watercourses are determined by the engineering and scientific analyses of geomorphic, hydraulic and hydrologic conditions. The potential for instability or erosion is influenced by the velocity, quantity and frequency of stream flow, the stream bank's physical characteristics, such as height and slope and soil type, and the weight or loading of the proposed structure.*

Buildings and structures built too close to a stream bank can be affected by the natural forces of a stream. Structures built near streams can also negatively affect streams and streamside resources. Structures built too close to the stream can :

1. Have adverse effects on streamside slopes, and on existing flood protection or drainage facilities. Roof runoff, outfalls or overbank drainage can cause erosion to the bank. The weight or loading of a structure can impact adjacent drainage or flood protection structures.
2. Have adverse effects on riparian corridors and vegetation.
3. Have adverse effects on streams, including sedimentation, altered stream hydrology, erosion and water quality degradation.
4. Be undermined over time as the stream bank naturally erodes.

## Slope stability protection trigger area

Projects that include construction of new roads, parking lots, pools and structures subject to the Uniform Building Code near a stream, must comply with local permit agency requirements for construction near a stream bank.

Requirements may relate to the location of a proposed structure to avoid impacts to the riparian corridor, and may consider the stability of the stream bank and impacts to the bank from the proposed construction. To guide the implementation of these requirements, a slope stability protection area, or trigger area has been established.

The slope stability protection or trigger area is measured from top of bank and is based upon stream

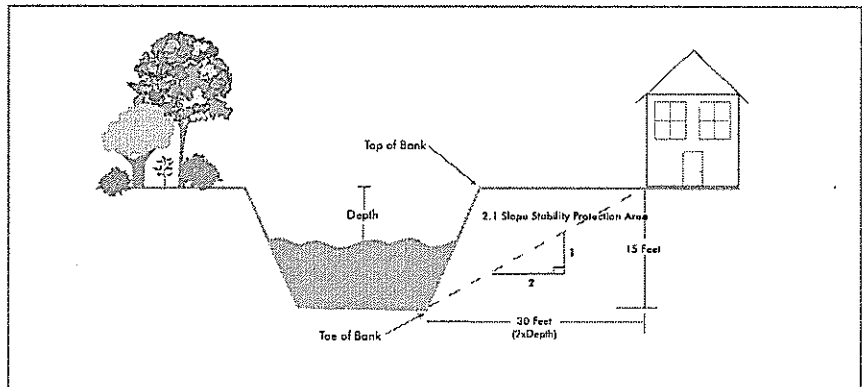


Figure 1. Protection or trigger area for a trapezoidal shaped channel.

characteristics. Implementation of a protection area is intended to help place structures on streamside properties in a location and manner that avoids or minimizes impacts to streams, streamside natural resources, flood protection and local drainage infrastructure and the proposed structure.

## Slope Stability Protection Area for New Development

For all new development and major redevelopment, the slope stability trigger area is the greater of:

1. A 2 to 1 slope stability protection or trigger area measured using a hypothetical 2 horizontal to 1 vertical line projected from the toe of bank to a point where it intersects the adjacent ground. A diagram showing this concept is shown in this handout. The protection area should allow for construction access and access around the structure. For banks of large streams, or for streams that are deeply incised or have highly erodable banks, the local permitting agency may increase the protection area in order to protect water quality, the riparian corridor, and other resources.
2. Twenty (20) feet from top of bank or property line. Buildings and improvements should be located outside the areas defined by the slope stability protection area or a geotechnical analysis as described below will be required.

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## Slope stability protection area for single family units

Every municipality and the county each have varying requirements and regulations for the placement of homes and accessory buildings which may not follow those described for new development. The slope stability protection area should be used as a guide for the placement of any structures, including pools and accessory buildings next to stream banks, for the safety of property owners and protection of their investment.

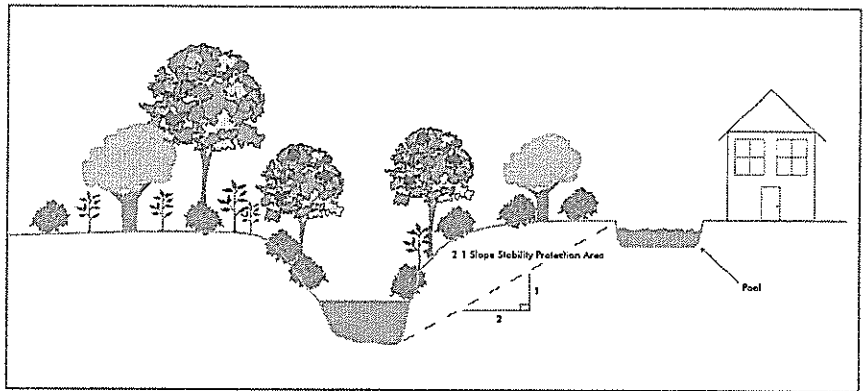


Figure 2. Protection or trigger area for a natural stream.

## Slope stability protection area triggers geotechnical study

If a structure is proposed closer to the stream bank than defined by the slope stability protection or trigger area, the applicant is required to conduct a study of on-site geotechnical and slope stability conditions.

The purpose of the study is to determine:

1. Whether the location of a proposed structure may threaten bank stability, and
2. Whether the bank is in an unstable or potentially unstable condition that may threaten structures and/or potentially cause a health and safety hazard.

The study needs to include a geotechnical analysis of soil conditions, a slope stability analysis

that considers static conditions and the action of the stream on the bank. The study must :

- 1) Demonstrate that development would not require introduction of hardscape in order to maintain a stable slope and
2. Show how maintenance or repair of the stream could be provided should it become necessary.

For banks of larger streams, or for streams that are deeply incised or have highly erodable banks, a permitting agency may require on-site geotechnical analyses even if the structure is outside the slope stability protection or trigger area.

## Flood protection for structures built near streams

Structures must meet Federal Emergency Management Agency (FEMA) and local flood hazard ordinance requirements if within a special flood hazard area. The Santa Clara Valley Water District recommends in many cases that higher standards than those required by FEMA be followed. An example of one of these requirements relates to the elevation of the lowest floor elevation of habitable building. FEMA requires that the lowest floor of habitable buildings be constructed above the base flood elevation. The water district recommends that the lowest floor be placed at least one foot and, preferably, two feet above the base flood elevation.

Refer to the district's Watershed Stewardship Plans and verify the status of any planned or anticipated flood protection projects. The district may request dedication of land rights for flood protection or maintenance access in conjunction with new or redevelopment projects.

For streams protected by levees, the water district recommends including an 18 to 25 foot building setback from the toe of levee to allow for potential emergency operations.

For more information, contact your local planning department, or SCVWD staff in the Community Projects Review Unit **(408) 265-2607 ext 2650**

# Use of Local Native Plant Species



## Handout 5-A of 7

### Introduction

Native plants are ecologically best suited to the creek environment. Using locally native plants for landscaping and revegetation projects near streams and riparian areas provide improved habitat and protection from bank erosion with the least amount of long-term maintenance. Most cities require that natives be used for new and major redevelopment.

### How to find and select natives in the watershed

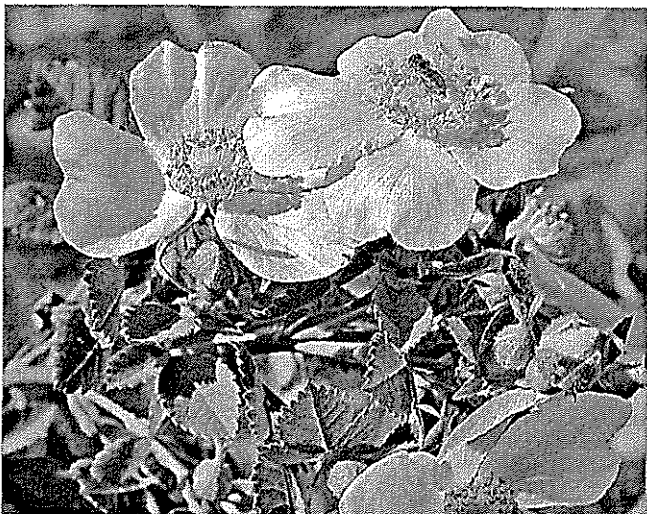
When vegetating the creek, choose native species growing nearby. If possible, make sure the plants used were propagated from seeds, cuttings or divisions collected from the same local creek or watershed. Try local home-grown native plants by collecting and planting seeds, or installing divisions and cuttings on the creek bank.

Oaks, buckeye and bay trees are easy to grow from seed planted directly into moist creek bank soil. Cottonwood and willow are easy to grow from cuttings stuck directly into moist sandbars. California rose, California blackberry, snowberry, mugwort, beardless wildrye and others can be propagated readily from vegetative offsets and divisions.

### Guidelines for planting native species

When choosing natives:

- **Ensure that the initial planting density is high**, averaging 6 to 12 feet on center, to create canopy coverage and quick closure. Include a range of species in the plant palette to fill in the understory, mid-story and overstory.
- **Avoid hardscape** such as patios, walkways and decks within these areas to minimize human impacts and maximize habitat value.
- **Maintain and monitor plantings** for a three-to five-year period to ensure healthy establishment. Performance and success criteria include percentage of allowable mortality and goals for an annual percentage of vegetative cover.
- **Slowly eliminate the need for human intervention**, including irrigation, weed control, replanting, pruning, etc. The final goal is to discontinue maintenance activities when habitat is self sustainable.



California Rose (*Rosa californica*)

#### Want even more information?

Try the California Native Plant Society's website:  
[www.cnps.org](http://www.cnps.org)

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# CreekWise Native Plant Species

Excerpted from: *Guidelines and Standards for Land Use Near Streams*

The following lists the riparian plant species that exist within the boundaries of Santa Clara County. Some species would never be seen together in the wild due to different preferences for microclimates, soil substrates and hydrologic regimes. If you are unfamiliar with local native plant ecology, consult local experts for help selecting the best plant palette for your particular creek or follow nature's example and copy what you see in a wild area located close to your project site.

## Trees:

Big Leaf Maple  
*Acer macrophyllum*

California Box Elder  
*Acer negundo* var. *californicum*

California Buckeye  
*Aesculus californica*

White Alder  
*Alnus rhombifolia*

Western Sycamore  
*Platanus racemosa*

Fremont Cottonwood  
*Populus fremontii* ssp. *fremontii*

Black Cottonwood  
*Populus trichocarpa*

Coast Live Oak  
*Quercus agrifolia*

Valley Oak  
*Quercus lobata*

Narrow-leaved Willow  
*Salix exigua*

Red Willow  
*Salix laevigata*

Yellow Willow  
*Salix lucida* ssp. *lasiandra*

Arroyo Willow  
*Salix lasiolepis*

Blue Elderberry  
*Sambucus mexicana*

California Bay Laurel  
*Umbellularia californica*

## Shrubs and Vines:

California Sagebrush  
*Artemisia californica*

Mule Fat  
*Baccharis salicifolia*

Virgin's Bower  
*Clematis ligusticifolia*

Toyon  
*Heteromeles arbutifolia*

Coffeeberry  
*Rhamnus californica*

California Wild Grape  
*Vitis californica*

Brown Dogwood  
*Cornus glabrata*

California Rose  
*Rosa californica*

California Blackberry  
*Rubus ursinus*

Snowberry  
*Symphoricarpos albus* var. *laevigatus*

## Ground Covers and Herbaceous Perennials:

Mugwort  
*Artemisia douglasiana*

Western Aster  
*Aster chilensis*

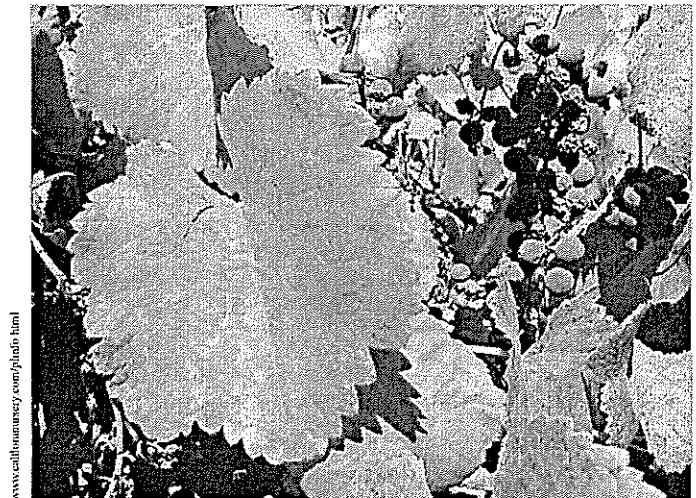
Douglas' Baccharis  
*Baccharis douglasii*

Western Goldenrod  
*Euthamia occidentalis*

Beardless Wildrye  
*Leymus triticoides*

Sticky Monkey Flower  
*Mimulus aurantiacus*

California Figwort  
*Scrophularia californica*



California Grape (*Vitis californica*)



# Use of Ornamental or Non-native Landscaping



## Handout 5-B of 7

If the use of local native plants propagated from local stock does not fit your landscaping goals, choose non-native ornamentals or non-local natives.

### Non-native ornamentals

Choose non-invasive and drought-tolerant, non-native ornamental plants having no potential to cross pollinate native riparian species. For example, if native valley and coast live oaks, willows, sycamores or cottonwoods exist in the riparian corridor at or near your site, don't plant ornamental oaks, willows, sycamores or poplars.

### Non-local natives

Choose non-invasive, drought tolerant, non-local California natives— also referred to as ornamental natives— with no potential to cross-pollinate local native species; for example- *Fremontodendron* or *Romneya*.

#### Non-local California native plants

These California native plants have a very low potential of hybridizing with Santa Clara County natives since they do not naturally occur in northern California.

##### Trees

Desert willow (*Chilopsis linearis*)

Catalina ironwood (*Lyonothamnus floribundus*)

Mesquite (*Prosopis glandulosa* var. *torreyana*)

##### Shrubs

Flannel bush (*Fremontodendron californicum* or *Fremontodendron mexicanum*)

Island bush Snapdragon (*Galvesia speciosa*)

Lemonade berry (*Rhus integrifolia*)

Sugar bush (*Rhus ovata*)

Matilija poppy (*Romneya coulteri*)

Jojoba (*Simmondsia chinensis*)

## Plant selection guide

When selecting plants and choosing their location in an ornamental landscape, the project design goals are generally geared to human occupancy and aesthetics. Hardscape features, such as patios, decks and walkways, are usually desired design components, yet these features should be avoided within the riparian habitat area.

There are vast choices of plants to meet the criteria for non-native ornamentals and ornamental native landscaping. The species selected will depend on the goals of the landscape plan, site constraints, the owner's desires and budget.

There are a variety of resources from which to select plants.. The East Bay Municipal Utility District has prepared a helpful book, entitled "Plants and Landscapes for Summer Dry Climates." The Sunset Western Garden Book lists plant selections that are suitable for both dry and moist places. Cities generally have plant lists assembled for water conservation purposes.

When making selections, avoid invasive plants and make sure that native species have been propagated from local natives in your watershed.



Flannel bush (*Fremontodendron californicum*)

continued on back...

# Commonly found invasive species to avoid

Excerpted from Guidelines and Standards for Land Use Near Streams

## Acacia

*Acacia* spp.

## Almond

*Prunus dulcis*

## Ash, evergreen

*Fraxinus uhdei*

## Bamboo, running types

*Arundinaria*, *Chimonobambusa*,  
*Phyllostachys*, etc.

## Black locust

*Robinia pseudoacacia*

## Broom, french

*Genista monspessulana*, previously  
*Cytisus monspessulanus*

## Broom, scotch

*Cytisus scoparius*

## Broom, spanish

*Spartium junceum*

## Cape weed

*Arctotheca calendula*

## Cotoneaster

*Cotoneaster* spp.

## Elm

*Ulmus* spp.

## Eucalyptus

*Eucalyptus* spp.

## Fig

*Ficus carica*

## Flowering plum, fruitful varieties

*Prunus* spp.

## Fountain grass

*Pennisetum setaceum*); purple variety  
"cupreum" is sterile and acceptable

## Foxglove

*Digitalis purpurea*

## Giant reed

*Arundo donax*

## Glossy privet

*Ligustrum lucidum*

## Gorse

*Ulex europaea*

## Himalayan blackberry

*Rubus discolor*

## Holly oak

*Quercus ilex*

## Iceplants

*Carpobrotus edulis*, *C. Chilensis*,  
*Mesembryanthemum* spp.

## Ivy, algerian

*Hedera canariensis*

## Ivy, cape

*Delairea odorata*, previously  
*Senecio mikanioides*

## Ivy, english

*Hedera helix*

## Kikuyu grass

*Pennisetum clandestinum*

## Lemon balm

*Melissa officinalis*

## Lombardy poplar

*Populus nigra* 'italica'

## London plane tree

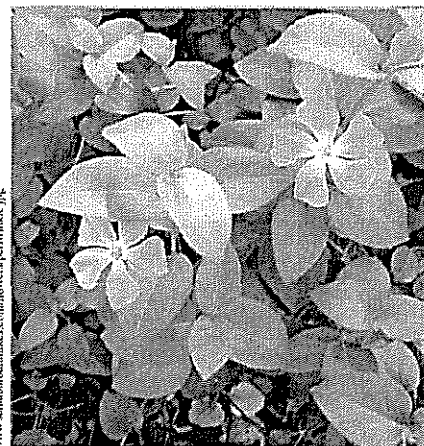
*Platanus acerifolia*

## Mint of any kind, including pennyroyal, peppermint, spearmint

*Mentha* spp.

## Monterey pine

*Pinus radiata*



Periwinkle (*Vinca major*)

## Myoporum

*Myoporum laetum*

## Olive

*Olea europaea*

## Pampas grass, jubata grass

*Cortaderia selloana*, *C. Jubata*

## Pepper trees

*Schinus* spp.

## Periwinkle

*Vinca major*

## Pyracantha

*Pyracantha* spp.

## Tamarisk, salt cedar

*Tamarix* spp.

## Tree of heaven

*Ailanthus altissima*

## Walnut, english or black

*Juglans regia*,  
*J. californica* var. *Hindsii*



Iceplant



English Ivy (*Hedera helix*)



# Temporary Erosion Control Options



## Handout 6 of 7

Temporary erosion control measures are typically employed:

- When grading and/or construction is being done in phases,
- If grading and/or construction is not completed by the rainy season.

These temporary techniques can also be used in conjunction with permanent revegetation. The following guidelines are used to determine how erosion control seed mixes should be used.



*Erosion damage on Adobe Creek.*

## Erosion control options for work sites with existing native plants

These erosion control options should be followed in most areas along natural creeks, where native trees, shrubs and herbs reside on or near the work site. A site visit or referral of a good series of photos to a landscape professional familiar with native plants or a revegetation specialist may be needed to determine the best approach.

### **If no irrigation is available, if the slope is very steep, or if it's late in the season**

- Use a non-biological method, such as straw, straw with tackifier, erosion control blankets (jute netting with straw or coir filling), etc. instead of seeding.

Benefits:

- The blankets are functional immediately after installation.
- The adjacent native plants will fill in at their own pace.

### **If there is absolutely no time to investigate site conditions yet early enough to plant.**

- Use a Failsafe mix with 50 lb/ac "Regreen" sterile wheat (*Triticum X Elymus* "Regreen"), with 95 percent minimum purity, and minimum germination of 85 percent.

Benefits:

- This plant mix makes few, if any, seeds so it cannot become a weed, and it usually lives only one year.
- The adjacent native plants can seed in thereafter.

*continued on back...*

## Erosion control options for work sites without existing native plants

These erosion control options should be followed in areas where there is no remaining native vegetation in the area— for example, a site on the back slope of a levee in an urbanized area.

### For sunny slopes 3:1 or flatter

- Use a California native grass mix of:  
Prostrate *Hordeum californicum* (Prostrate California barley) at 16 pounds per acre (lb/ac), minimum purity 90 percent, minimum germination 80 percent.

*Elymus glaucus* "Berkeley" ("Berkeley" blue wildrye) at 12 lb/ac, minimum purity 95 percent, minimum germination 85 percent.

*Bromus carinatus* "S.F. Bay Area" ("S.F. Bay Area" California brome) at 10 lb/ac, minimum purity 95 percent, minimum germination 85 percent.

- Use a Failsafe mix of:  
50 lb/ac "Regreen" sterile wheat (*Triticum X Elymus* "Regreen"), minimum purity 95 percent, minimum germination 85 percent.
- Use a non-biological method as outlined on reverse.

### For slopes 2:1 or steeper

- Use a California native grasses PLUS mix: The mix for slopes 3:1 or flatter PLUS *Vulpia microstachys* (Three-weeks fescue) at 5 lb/ac, minimum purity 95 percent, minimum germination 70 percent.
- Use a failsafe mix of:  
50 lb/ac "Regreen" sterile wheat (*Triticum X Elymus* "Regreen"), minimum purity 95 percent, minimum germination 85 percent.
- Non-biological method as outlined on reverse.

### For shady slopes

- Use a nonbiological method because grasses tend to require sunny conditions.



*Elymus glaucus* "Berkeley" ("Berkeley" blue wildrye)

### Seed mixes to avoid

Some commercially available seed mixes contain invasive species, which compete aggressively with native plants and will become future fire hazards.

These seed mixes should be excluded from streamside areas. Examples are Blando brome, rose or red clover and annual rye.

# Creekwise

## Grading and Drainage

Use of Vegetated Swales or Buffer Strips



### Handout 7 of 7

## Introduction

The Guidelines and Standards refer to the use of vegetated swales or buffer strips. A vegetated swale (a.k.a. grassed channel, dry swale, wet swale or biofilter) is a broad, shallow channel with a dense stand of vegetation designed to trap particulate pollutants (suspended solids and trace metals). Vegetated swales are fairly straight forward to design and can be easily incorporated into a project's site drainage plan. For all major redevelopment and new development, the use of vegetated swales may be included in the stormwater permit; however, they are also a good practice for single family homeowners to consider incorporating in landscaping and design plans.

Using vegetated swales or buffer strips next to streams provide many benefits, including:

1. Improving the quality of stormwater runoff and reduce or slow the velocity of runoff from hardened or paved areas
2. Allowing for infiltration
3. Providing an opportunity for sediment and pollutants to be filtered and removed from the runoff.

The swales can be located within landscaped or turf areas and can collect runoff from patios, driveways, roof drains and parking lots. Discharge from the swale should be to a storm drain system, which will ultimately discharge to a stream.

## Design elements

- Gentle side slopes: 3 horizontal to 1 vertical slope maximum
- Minimal longitudinal slope: 1 percent to 2 percent recommended. If greater, install check dams to reduce velocity. Do not use swales on slopes greater than percent.
- Flowpath length: Minimum of 10 feet
- Bottom width: 2 to 8 feet. Consider access with mowing equipment if turf grasses are used.

## Recommended vegetation to use

There is a variety of vegetation, including trees, shrubs, groundcover and grasses that are suitable for periodic inundation (see plant list on reverse). One goal is to select plants that will thrive at the site. Near streams, native plants and wetland vegetation are preferred to turf grasses as swale liners because they offer higher resistance to flow and provide a better environment for filtering and trapping pollutants from stormwater. However, turf grass, allowed to remain slightly high, can provide some benefits as well.

## Maintenance

Turf maintenance consists of mowing and removal of grass clippings. Swales should be cleaned of any sediment accumulation and monitored for erosion with subsequent reseeding or replanting as necessary. Fertilizers should be applied before the rainy season to minimize conveyance of pollutants to the stream.

# Plant Species for Vegetated Buffers and Swales

The following trees and shrubs tolerate wet soil and periodic inundation, and may be suitable for planting in basins and biofilters depending on regional hardiness and other factors. This list is not all-inclusive, and draws from both native and exotic species.

## Trees

Box Elder (N)  
*Acer negundo*

Red Maple (H)  
*Acer rubrum*

Silver Maple (H)  
*Acer saccharinum*

Alder (N)  
*Alnus spp.*

Birch  
*Betula spp.*

Pecan  
*Carya illinoensis*

Buttonbush  
*Carya ovata*

She-Oak  
*Casuarina spp.*

Lily of the Valley  
*Clethra arborea*

Redtwig Dogwood (N)  
*Cornus stolonifera*

Persimmon  
*Diospyros virginiana*

Oregon Ash (N)  
*Fraxinus latifolia*

Honey Locust  
*Gleditsia triacanthos*

Liquidambar  
*Liquidambar styraciflua*

Tulip Tree  
*Liriodendron tulipifera*

Southern Magnolia  
*Magnolia grandiflora*

Sweet Bay  
*Magnolia virginiana*

Cajeput Tree  
*Melaleuca quinquenervia*

Tupelo  
*Nyssa sylvatica*

Sitka Spruce  
*Picea sitchensis*

Sycamore (H)  
*Platanus occidentalis*

California  
Sycamore (N)  
*Platanus racemosa*

Fremont  
Cottonwood (N)  
*Populus fremontii*

Wingnut  
*Pterocarya stenocarpus*

Bur Oak (H)  
*Quercus macrocarpa*

Pin Oak (H)  
*Q. palustris*

Willow (N)  
*Salix spp.*

Bald Cypress  
*Taxodium distichum*

Arborvitae  
*Thuja occidentalis*

## Shrubs

Salal (N)  
*Gaultheria shallon*

Horsetail (N)  
*Equisetum hyemale*

Fern (N)  
*Ferns (many spp.)*

Iris (N)  
*Iris (many spp.)*

Myoporum 'putan creek'  
*Myoporum parvifolium*

Pacific Wax  
Flower (N)  
*Myrica californica*

Willow (N)  
*Salix spp.*

Huckleberry (N)  
*Vaccinium ovatum*

## Ground cover

Acorus  
*Acorus gramineus*

Sedge (N)  
*Carex spp.*

Tufted Hairgrass (N)  
*Deschampsia caespitosa*

Sierra Laurel  
*Leucothoe davisiae*

Bulrush  
*Scirpus spp.*

Rush (N)  
*Juncus spp.*

Spiderwort  
*Tradescantia virginiana*

Common Cattail (N)  
*Typha latifolia*



*Iris douglasiana*

<http://www.colloata.org>

## Suitable turf grass

Bentgrass (N)  
*Agrostis exarata*

California Brome (N)  
*Bromus carinatus*

Creeping wildrye (N)  
*Elymus triticoides*

Idaho Fescue, (N)  
Blue Bunchgrass  
*Festuca idahoensis*

Molate/Red  
Fescue (N)  
*Festuca rubra*

Meadow Barley (N)  
*Hordeum brachyantherum*

Meadow Barley salt (N)  
*Hordeum brachyantherum*

Rushes (N)  
*Juncus spp.*

N = Use plants grown from propagules collected locally

H = This species has a potential to hybridize with natives. Delete if native plants of the same genus exist nearby.

Table excerpted from BASMAA's Start at the Source Guide (2003) and adapted from Harris (1992), Sunset Western Garden Book (1998) and ABAG (1995b). "Start at the Source" is available at [http://www.scvurppp-w2k.com/basmaa\\_satism.htm](http://www.scvurppp-w2k.com/basmaa_satism.htm). Other design guidance for pollution prevention is available at [www.scvurppp.org](http://www.scvurppp.org)

# Planning for Land Use and Habitat Protection in the Santa Clara Valley

*Building a common vision – Balancing projected development with the natural environment*



Like many California locations, Santa Clara County’s weather, economy, and proximity to stunning natural environments make it an incredibly desirable place to live. California’s climate, geology, and topography also make the state one of the world’s richest biological regions, housing the second greatest number of threatened and endangered species of any US state (Hawaii being the first).

The Association of Bay Area Governments projected that between 2000 and 2020, Santa Clara County will gain 261,400 new residents and 231,000 new jobs - more than any other county in the greater San Francisco Bay Area. Research on endangered species determined many years ago that urban sprawl and habitat loss are primary contributor to species decline in the United States. Invariably, all “land uses” to support growth - whether it be constructing and maintaining public infrastructure, agricultural development, or urban development - contribute to habitat decline by converting land from its original use. So how is Santa Clara County going to maintain it’s current infrastructure and accommodate anticipated growth without compromising the region’s biological diversity?

*continued on inside*

## Species Recommended for Potential Inclusion in HCP/NCCP

*(as of September 2006, ongoing analysis will result in adjustments to the list)*

### Amphibians and Reptiles

California Tiger Salamander  
California Red-legged Frog  
Foothills Yellow-legged Frog  
Western Pond Turtle

### Birds

Bank Sallow  
Golden Eagle  
Least Bell’s Vireo  
Purple Martin  
Saltmarsh Common Yellowthroat  
Tricolored Blackbird  
Western Burrowing Owl

### Fish

Central California Coast Steelhead (ESU)  
Central Valley Fall Run Chinook Salmon (ESU)  
Monterey Roach  
Pacific Lamprey  
South Central California Coast Steelhead (ESU)

### Insects (Invertebrates)

Bay Checkerspot Butterfly  
Unsilvered Fritillary Butterfly

### Mammals

San Joaquin Kit Fox  
Townsend’s Western Big-eared Bat

### Plants

Arcuate Bush Mallow  
Big-scale Balsamroot  
Chaparral Harebell  
Coyote Ceanothus  
Fragrant Fritillary  
Hall’s Bush Mallow  
Loma Prieta Hoita  
Metcalf Canyon Jewelflower  
Most Beautiful Jewelflower  
Mt. Hamilton Thistle  
Robust Monardella  
Rock Sanicle  
San Francisco Collinsia  
Santa Clara Valley Dudleya  
Smooth Lessignia

### Species Recommended for No-Take Status:

### Birds

California Condor

### Plants

Tiburon Indian Paintbrush  
Pink Creamsacs  
Robust Spineflower  
Contra Costa Goldfiends  
Hairless Popcornflower  
Showy Indian Clover  
Caper-fruited Tropicocarpum

## SANTA CLARA VALLEY

### Habitat Conservation Plan / Natural Community Conservation Plan



County of Santa Clara • City of San Jose • City of Gilroy • City of Morgan Hill  
Santa Clara Valley Transportation Authority • Santa Clara Valley Water District  
California Department of Fish and Game • U.S. Fish and Wildlife Service  
National Marine Fisheries Service



In response to land use-related projects, the County of Santa Clara, Santa Clara Valley Transportation Authority, Santa Clara Valley Water District, and the cities of Gilroy, Morgan Hill, and San Jose (Local Partners) initiated a collaborative process to prepare and implement a joint Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP) to promote the recovery of endangered species while accommodating planned development and infrastructure. The Local Partners, in association with regulatory wildlife agencies including the U.S. Fish and Wildlife Service, California Department of Fish and Game, and National Marine Fisheries Service, will develop a long-range plan to protect and enhance ecological diversity and function within more than 500,000 acres of Santa Clara County.

Habitat Conservation Plans/Natural Community Conservation Plans are a relatively new tool for protecting endangered species and represent an innovative integration of land-use planning and habitat conservation. The Santa Clara Valley HCP/NCCP will provide a more efficient process for protecting the environment while streamlining the permitting process. Under the current system, local governments evaluate projects with the potential to affect endangered species individually in consultation with federal and state regulatory agencies -- a lengthy process that can cost considerable time and money. Rather than surveying, negotiating, and securing mitigation for habitat loss on a project-by-project basis, the Santa Clara Valley HCP/NCCP will provide a more effective process for protecting



the environment by creating a number of new habitat reserves that will be both larger in scale, more ecologically valuable, and easier to manage than the fragmented, piecemeal habitats currently yielded by mitigating projects on an individual basis.

The process works like this: When state or local governments, private developers, or other non-federal entities wish to conduct activities on land that might result in harming or significantly modifying the habitat of a threatened or endangered species, they must obtain an incidental take permit from one or more regulatory wildlife agencies (U.S. Fish and Wildlife Service, National Marine Fisheries Service, and the California Department of Fish and Game). An approved incidental take permit authorizes the landowner to legally proceed with an activity (such as building a road, installing a water pipeline, or constructing a

development) that would otherwise result in an illegal impact to a listed species (i.e., take). By means of the Santa Clara HCP/NCCP, the Local Partners will ensure there is adequate mitigation for the cumulative effects of authorized incidental take and will request permits from regulatory Wildlife Agencies to cover federal or state listed species and species likely to become listed during the Plan's permit term. If the HCP/NCCP is approved by participating Wildlife Agencies, incidental take permits will be issued for a list of projects and activities identified within the Plan as likely to occur during the permit term. These activities are expected to include urban and rural development consistent with current city and County land use plans; maintenance and operations of public infrastructure (water, transportation); activities within streams; and management and monitoring activities within habitat reserve lands. By collaboratively agreeing on covered species, no-take species, covered activities, conservation requirements, and the permit term, infrastructure and development projects included in the HCP/NCCP will be able to proceed as scheduled with the assurance that permitting and critical habitat issues have already been addressed.

Terms

- Endangered** – Species at risk of becoming extinct
- Threatened** – Species at risk of becoming endangered in the foreseeable future
- Take** – Defined in the Federal or State Endangered Species Acts as to harass, harm, pursue, hunt, or collect a species
- Incidental Take Permit** - Permits allowing the “take” of endangered species incidental to an otherwise lawful activity (such as building a road or constructing a development).

Project Milestones and Schedule

Develop Baseline Data (covered species; covered activities; land cover and land use maps)	Draft Conservation Strategy	Draft HCP/NCCP and Draft Environmental Review documents preparation and public review	Certification of the Environmental Review and Approval of Final HCP/NCCP
2006	2007	2008	2009



Western Pond Turtle



California Burrowing Owl



Diablo Helianthella



Common Yellowthroat



San Joaquin Kit Fox



Mt. Hamilton Thistle



California Red-Legged Frog



Golden Eagle

## **ATTACHMENT E**

### **Web Page Enhancements**

1. Trail Closures: Information is posted on current and planned closures so users can plan detour trips accordingly.
2. Community Meetings: Meeting notices and notes are posted so that interested parties find it easier to participate in the planning process.
3. Trail Information: An overview of the recently created Trail Information Center is provided. The center is located on Coleman Avenue, within the Guadalupe River Park, and offers visitors maps and aerial views of several developing trail systems.
4. Trail Closure Process: A systematic approach is prescribed for contractors and outside agencies to follow when a project requires a trail closure. A special tri-fold brochure has been developed and will be made available at the City's Public Information Desk.
5. Trail Facts: Residents often express concern about the perceived negative impacts of trail development. This two-side document provides an overview of national studies that document the benefits associated with trails in terms of economic development, public safety, and housing values.
6. Trail Safety: Staff is convening a working group comprised of representatives from the Police Department, Parks, Recreation and Neighborhood Services, and the District. The group will develop a safety guide to be posted on the Trail Program web site and provide a set of action items for a future network-wide signage system. The group will meet in January 2007.

## ATTACHMENT F

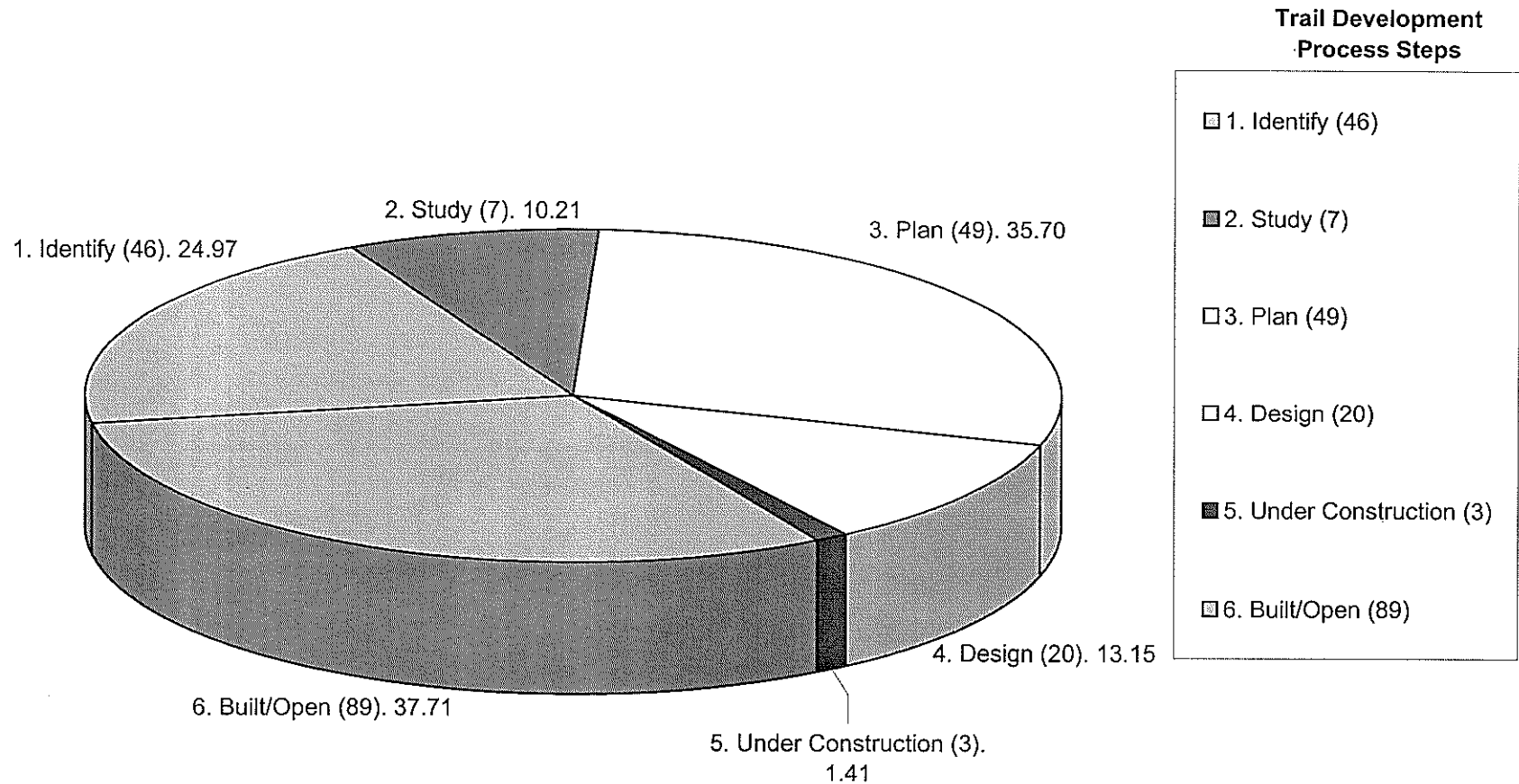
Project Name / Milestone I.D.	From	To	Length (mi.)	CAP Order	Interim	Status
Albertson Parkway (ALB01)	Cresta Vista Drive	Curie Drive	0.49	Open-Rehab		<ul style="list-style-type: none"> <li>(Non-CAP Project) Existing trail system in need of pavement repair/reconstruction and landscaping.</li> <li>Contract terms negotiated with consultant firm for community process and preparation of construction documents.</li> </ul>
Bay Trail – Reach 9 (BAY09)	Saratoga-San Tomas Creek	Alviso Slough	1.10	Planning		<ul style="list-style-type: none"> <li>\$800,000 in funding (SAFETEA-LU Federal Transportation Bill) programmed in MTC TIP, requires City to expend \$180,000 in FY06/07.</li> <li>Staff coordinating with Caltrans-Local Assistance to secure necessary authorizations before expenditure of funds.</li> </ul>
Bay Trail – Reach 9B (BAY09B)	Alviso Slough (north bank)	Alviso Slough (south bank)	0.10	Study		<ul style="list-style-type: none"> <li>Grant funding agreement with ABAG for \$95,000 executed.</li> <li>Grant extended to April 2007.</li> <li>Consultant contract awarded to perform study.</li> <li>Seeking permits to conduct soil-boring tests within waterway.</li> </ul>
Bay Trail – Reach 7 (BAY07)	Gold Street	UPRR	0.49	Plan	Interim	<ul style="list-style-type: none"> <li>Staff to review existing agreements with Federal, State and local parties to determine if public access can be permitted.</li> <li>Development of Joint Trail Agreement for interim trail access to be finalized once required permits/authorizations are defined.</li> </ul>
Coyote Alamitos Canal (COA01-02)	Lake Almaden	Coyote Creek	9.90	Study		<ul style="list-style-type: none"> <li>Consultant contract negotiated. Staff seeking signatures necessary for execution of agreement.</li> <li>Notice to Proceed anticipated to be issued in January 2007.</li> </ul>
Coyote Creek – Reach A (COY05)	Montague Exp	Highway 101	3.76	Planning		<ul style="list-style-type: none"> <li>\$4,000,000 in SAFETEA-LU funds programmed in MTC TIP, requires \$861,000 to be expended on PSE in FY 07/08.</li> <li>Staff coordinating with Caltrans-Local Assistance to secure necessary authorizations before expenditure of funds.</li> <li>Staff coordinating with State of California to program secured grant funds for master planning purposes.</li> </ul>
Coyote Creek – Reach B-1, B, 1a-1, 1b (COY06-10)	Highway 101	Story Road	2.67	Planning		<ul style="list-style-type: none"> <li>See above (regarding SAFETEA-LU funds)</li> <li>Consultant agreement for preparation of master plan executed.</li> <li>Initial site walk conducted in December 2006.</li> </ul>
Coyote Creek – Reach 2 (COY 11)	Story Road	Kelley Park (Phelan Avenue)	0.87	Design		<ul style="list-style-type: none"> <li>Preparation of 35% stage construction documents should be prepared by April 2007.</li> <li>No funds in place for further development.</li> <li>Staff submitted two grant applications to the State of California (California River Parkways Grant Program) and MTC (Transportation for Livable Communities) in an effort to fund completion of design and construction. Both applications were turned down.</li> </ul>
Coyote Creek – Reach 3,	Kelley Park	Los Lagos Golf	1.88	Design		<ul style="list-style-type: none"> <li>Master plan completed.</li> </ul>



4a (COY 13)	(Phelan Avenue)	Course (Idlewood Dr.)				<ul style="list-style-type: none"> <li>Design work underway.</li> </ul>
Coyote Creek – Reach 20B (COY 20B)	Piercy Rd	Silicon Valley Blvd / Tennant Ave	1.67	Design		<ul style="list-style-type: none"> <li>RDA has budgeted \$300,000 for project design.</li> <li>Plans developed to the 60% stage and under review by staff.</li> </ul>
Fowler Creek (FOW 02)	Alita Ave	Ruby Ave	0.39	Construction		<ul style="list-style-type: none"> <li>Pedestrian bridge installed.</li> <li>Construction of trail underway.</li> <li>Expected completion is in July 2007.</li> </ul>
Guadalupe Creek Trail – Almaden Exp Bridge (GUC 01A)	Los Alamitos Creek Confluence	Guadalupe Creek	0.04	Study		<ul style="list-style-type: none"> <li>The VTA BEP identifies \$496,000 in grant funds for PSE phase of the project.</li> <li>Staff coordinating with VTA to access the funds.</li> <li>Staff coordinating with the County of Santa Clara to monitor their efforts to underground power lines that would impact the bridge's development.</li> </ul>
Guadalupe Creek Trail – Reach 6 (GUC 01)	Almaden Exp	Singletree Way	1.73	Construction	Interim	<ul style="list-style-type: none"> <li>Joint Trail Agreement for interim use has been processed by both agencies.</li> <li>Staff is finalizing work orders for signage/fencing.</li> </ul>
Guadalupe River – Reach A to D (GUA01-04)	Gold St / Alviso	Hwy 101	4.66	Planning	Interim	<ul style="list-style-type: none"> <li>Joint Trail Agreement for interim use has been processed by both agencies.</li> <li>Staff is finalizing work orders for signing/fencing.</li> </ul>
Guadalupe River – Reach E (GUA05 and 05A)	Hwy 101	Hwy 880	2.04	Construction		<ul style="list-style-type: none"> <li>Fund Transfer Agreement approved by the City Council.</li> <li>City to transfer \$1,789,500 to escrow account for District use.</li> <li>District to construct Airport Parkway Under-Crossing during summer 2007.</li> </ul>
Guadalupe River – Reach 6 (GUA16)	Woz Way	Virginia St	0.19	Design		<ul style="list-style-type: none"> <li>Geotechnical Study underway to determine soil conditions; data supports preparation of engineering documents.</li> <li>City Council authorized development of cost-sharing agreement (January 23) with the SCVWD for funding of study.</li> </ul>
Guadalupe River Park	Grant Street	Highway 880	2.80	Built		<ul style="list-style-type: none"> <li>Agreement under review. Defines roles and responsibilities of each agency in managing and operating park.</li> </ul>
Hwy 237 Bikeway (H237 01)	Calabazas Creek	Coyote Creek	3.54	Planning		<ul style="list-style-type: none"> <li>(Non-CAP Project) Coordinate with DOT and Caltrans to process an agreement to assume maintenance responsibility.</li> </ul>
Los Gatos Creek – Reach 4 (LGC 03)	Lincoln Ave.	Auzerais Ave.	0.64	Design		<ul style="list-style-type: none"> <li>Construction underway, with retaining walls and under-crossing at Highway 280 substantially completed.</li> <li>Work on hold between October and June per Resource Agency permits.</li> <li>Work to resume in June and completed by November 2007.</li> </ul>
Los Gatos Creek – Reach 5 (LGC 02)	Auzerais Ave	Santa Clara St / Confluence Pt	0.90	Planning		<ul style="list-style-type: none"> <li>Preparation of EIR underway.</li> <li>Conceptual layout for Santa Clara Street and San Carlos Street under-crossings under development with input from SCVWD staff.</li> </ul>
Penitencia Creek – Reach 1 (PEN 12)	Alum Rock Park	Noble Ave.	0.55	Planning		<ul style="list-style-type: none"> <li>Planning project completed in November 2006.</li> </ul>

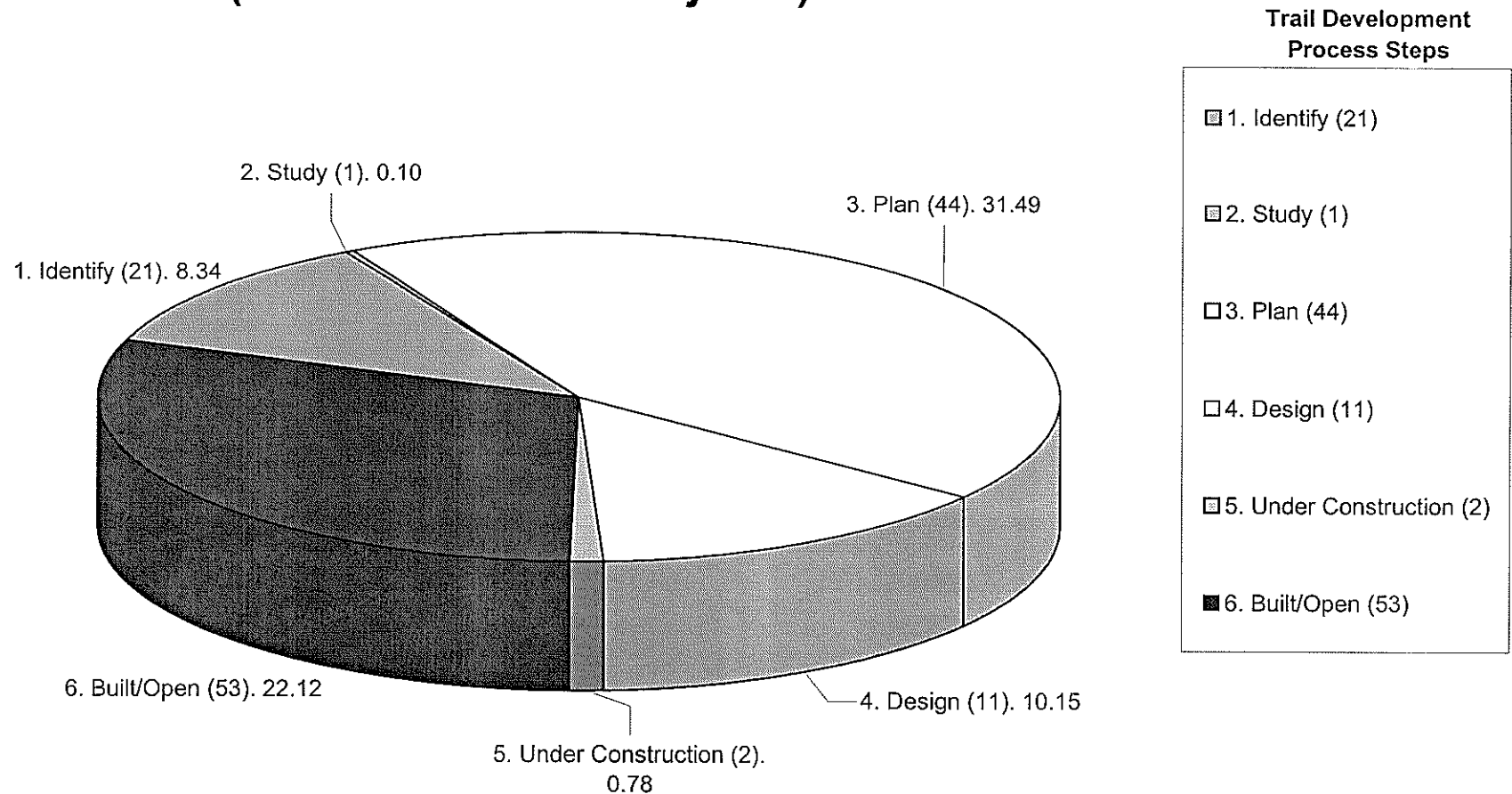
Penitencia Creek - Reach 2B (PEN 11)	Noble Ave.	Piedmont Rd.	0.62	Construction	Interim	<ul style="list-style-type: none"> <li>Construction project completed in November 2006.</li> <li>Interim Trail Agreement drafted and under review.</li> </ul>
Penitencia Cr. Reach 6 (PEN 02-04)	King Rd.	Mabury Ave.	0.34	Design		<ul style="list-style-type: none"> <li>Design work under-way for a paved trail.</li> <li>Tri-Party Agreement executed by County and SCVWD.</li> <li>Agreement scheduled for City Council meeting on February 27.</li> <li>Effort to develop "interim" trail is no longer underway as County did not have resources for such a project.</li> </ul>
(Lower) Silver Creek – Reach 1 to 16 (SCL01-16)	Thompson Creek	Coyote Creek	5.31	Planning		<ul style="list-style-type: none"> <li>Master Plan process underway</li> <li>Staff and consultant team to meet with several property owners regarding project impacts.</li> </ul>
(Lower) Silver Creek – Reach 12A (SCL 12A)	Dobern Ave Bridge	Bambi Lane	0.09	Construction		<ul style="list-style-type: none"> <li>Project completed.</li> </ul>
(Lower) Silver Creek – Reach B (SCL 21) (Barberry Lane Pathway)	King Road	Corda Drive	0.21	Study		<ul style="list-style-type: none"> <li>Study finalized, no conclusive findings related to odor issue.</li> <li>Staff presented findings to community on January 22 and provided cost estimate for channel burial.</li> </ul>
Thompson Creek (THO 01)	Tully Rd.	Aborn Rd.	1.77	Planning	Interim	<ul style="list-style-type: none"> <li>Site visit conducted.</li> <li>Staff is finalizing work orders for signage/fencing.</li> </ul>
Willow Glen Spur (west) (WG 03-08)	Los Gatos Creek	Highway 87 Bikeway	1.48	Planning		<ul style="list-style-type: none"> <li>(Non-CAP Project) Negotiations between City Manager's Office and UPRR underway.</li> </ul>
Willow Glen Spur (east) (WG 09-11)	Highway 87 Bikeway	Coyote Creek	1.71	Planning		<ul style="list-style-type: none"> <li>(Non-CAP Project) Staff to assess acquisition after reaches WG03-08 are secured.</li> </ul>

## Joint City of San Jose-SCVWD Trail Inventory 2006 4th Quarter Trail System Status (Number of Trail Projects) and Trail Miles\*



\*Approximately 123 miles of trail identified in the City of San Jose/ Santa Clara Valley Water District Trail Inventory.

### City of San Jose-SCVWD CAP Trails 2006 4th Quarter Trail Status (Number of Trail Projects) and Trail Miles\*



\*Approximately 73 miles of trail identified under the City of San Jose/ SCVWD Collaborative Action Plan (CAP).